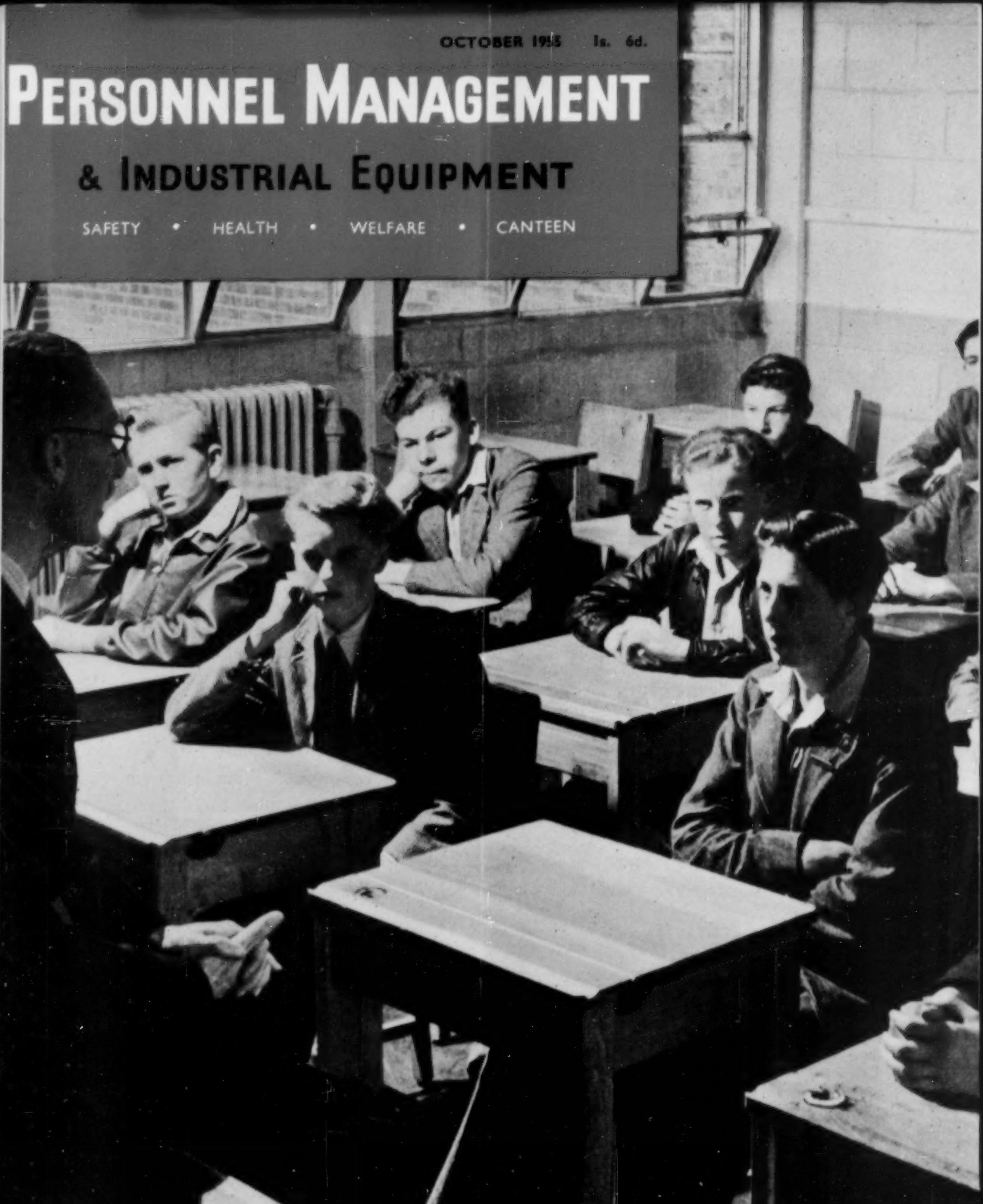
OCTOBER 1955 1s. 6d.

PERSONNEL MANAGEMENT

& INDUSTRIAL EQUIPMENT

SAFETY • HEALTH • WELFARE • CANTEEN



Youth's Offer To Industry *(see page 211)*

but the tempo
will be different
tomorrow

What a difference to get out of a noisy office, to hear the insinuating rhythm of good dance music. What a difference if the sounds in your office could be as pleasant. Your staff would start each week as cheerfully as they began the week-end. Most offices could be improved if unwanted noise was soaked up. Cullum can reduce noise wherever it is damaging efficiency, sapping stamina and creating absenteeism.
If you have a noise problem call in Cullum *now*.

Sound control by **CULLUM**

THE ACOUSTIC CONSULTANTS AND CONTRACTORS

Concessionnaires for **ACOUSTI-CELOTEX**

PROGRESS WITH QUIETNESS

HORACE W. CULLUM & CO. LTD., FLOWERS MEWS, LONDON, N.19 Tel: ARC 2662 (4 lines)

TOUGHSPEC BAKELITE LAMINATED GOGGLE PBS/1

CONTOUR MOULD NYLON WELDERS' GOGGLE PCW/1

LIGHT-WEIGHT PLASTIC FACE SHIELDS PE/14 & PE/15

they face the job with confidence

—if they're equipped with Safety Products' equipment they have full protection and a comfort which gives freedom for complete concentration on the job.

Throughout industry—chemical, paint, machining, fabrication—S.P. equipment becomes a protective habit because strength is achieved with lightness, there is maximum vision and real comfort.

CONTOUR MOULD NYLON GRINDERS GOGGLE PCF/1

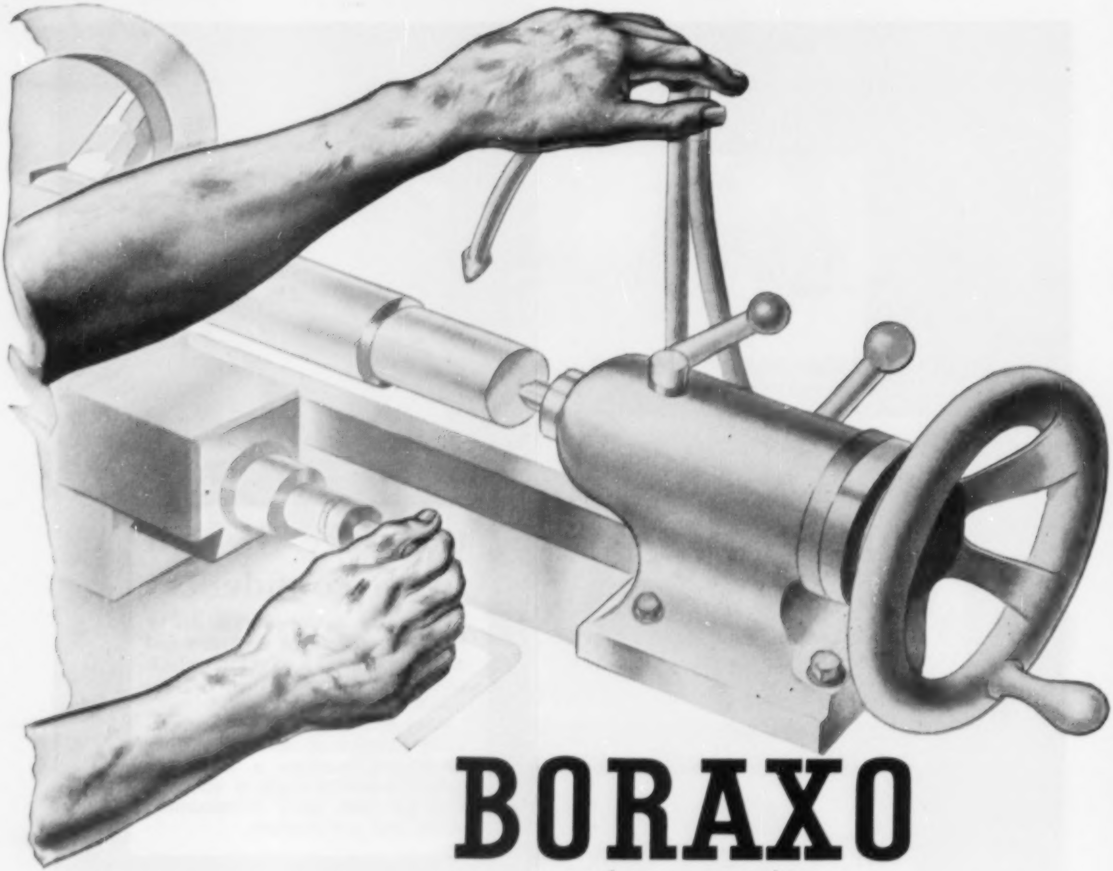
FILTRON LOW CONCENTRATION FUME RESPIRATOR

UNO PLASTIC GOGGLE

SAFETY PRODUCTS LIMITED

ST. GEORGE'S HOUSE 44 HATTON GARDEN · LONDON EC1 · TEL: CHANCERY 9141

P.1871



BORAXO

(BRAXO)

cleans DIRTY hands

Whenever hands become really dirty, they need Boraxo. It readily tackles ingrained dirt, grease and oil, does not harm the skin, leaves the hands smooth and supple. The reputation of Boraxo is high among doctors and personnel officers. They like it because it is safe and efficient besides being economical.

The strong pilfer-proof dispenser ensures greatest economy in use.

Satisfied users of Boraxo include :— W. & T. Avery Ltd. Birmingham Aluminium Casting (1903) Co. Ltd · British Timken Ltd · J. B. Brooks & Co. Ltd. Marsh & Baxter Ltd · Perry Barr Metal Co. Ltd. Jaguar Cars Ltd · Scribbans-Kemp (Bakeries) Ltd. South Eastern Gas Board · Telegraph Condenser Co. Ltd · Wickman Ltd · Bowden (Engineers) Ltd.

Free trial

2

Give Boraxo a trial in *your* works. Attach this coupon to your letter heading for a free sample and full information

Name of Executive..

BORAX CONSOLIDATED, LIMITED

Borax House · Carlisle Place · London SW1 · *Victoria 9070*

BO4

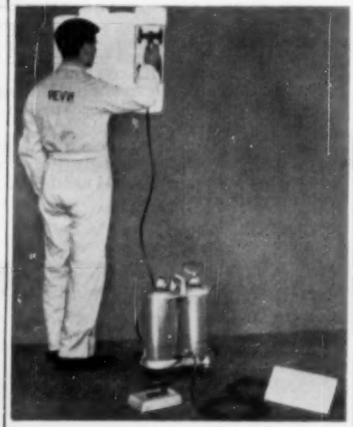
CUT PAINT CLEANING COSTS

WITH THE

"REVVI"

Wall Washing Machine

Improves Working Conditions
Stimulates Hygiene



Walls and ceilings can be washed cheaply and with the minimum of disorganisation by means of the REVVI washing machine.

A saving of at least one half of the normal labour costs is effected.

Being silent in operation and not requiring very much floor space, the REVVI machine does not distract the attention of persons working near it. For ease of movement, it is fitted with rubber-tyred castors. The water and cleaning solutions do not drip on to floors, machines or desks, so dust sheets are not needed.

The cylinders of the REVVI machine are filled with clear water and REVVI detergent solution respectively, and both water and solution are kept under pressure by a few strokes of a manually-operated air pump. A few minutes' pumping is sufficient to last the day's operations.

PRICE COMPLETE £55

For further details write or phone :

REVVI
LIMITED
70 Blackstock Road, London, N.4
Telephone : CANonbury 5246-7

OCTOBER 1955

PERSONNEL MANAGEMENT
& INDUSTRIAL EQUIPMENT
SAFETY • HEALTH • WELFARE • CANTEEN

MANAGEMENT OF PERSONNEL

This Service Means Personnel Managers Can Plan Ahead Robert McKinnon 211
Describes how the Youth Employment Service works and how personnel managers can use its facilities

Management Through The Supervisor's Eyes Discussion Leader 221
Do Your Notice Boards Really Catch The Eye? How to ensure that works' notices are read and understood

Staff Selection In A Seller's Market—3 Elizabeth Sidney 222
How To Use Tests When Choosing Skilled Labour

What Automation Means—2 Frank Woollard 228
How the Robot Factory will affect people's jobs. Discusses the probable effects of new plant on our labour pattern

INDUSTRIAL EQUIPMENT AND MANAGEMENT

Equipment That Raises Output 237
EFFICIENCY AIDS ★ WELFARE ★ BUILDING ★ HANDLING LIGHTING ★ HEATING ★ SAFETY ★ CLEANING

WELFARE, TRAINING AND HEALTH

Training With Pay For The Young Office Girl Paul Bennett 226
"Personnel Management" Picture Story illustrating how one firm builds up a contented, well-trained office staff

This Firm Gives Chargehands A Year's Training Andrew Stevens 230
Describes an "on-the-job" training scheme for potential foremen that takes them into all departments of the firm

SAFETY · ACCIDENT PREVENTION CIVIL DEFENCE

How Mechanical Handling Can Cut Down Accidents Robert Mitchell 214
An account of the reasons why mechanical handling units lead to safer, swifter working in most shop-floor jobs

Safety News Round-up 216

CANTEENS AND CATERING

Use Your Canteen To Boost Better Diets M. F. Fincham 234

NEWS AND READERS' SERVICE

Management At Work .. 224
People At Work 232
Canteen Advice Bureau .. 240
Summary of Official Publications 241
October Diary for Management 242

VOL. 22. No. 185. Published by Shaw Publishing Co. Ltd., 180 Fleet Street, London, E.C.4 (CHA. 8844) incorporating "Civil Defence Journal and ARP & NFS Review" and "Welfare," London. Subscription rates: 20s. per year, post free, U.K. and Eire; 25s. overseas. CHANGE OF SUBSCRIBER'S ADDRESS. Please inform the Publishers six clear weeks in advance and include present address as well as new address required.

ABIX——CYCLE STANDS

A Quarter of a Century's experience in Cycle Stand Manufacture

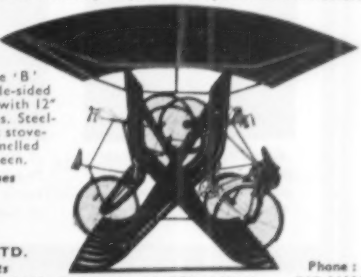
STEEL CLOTHES LOCKERS

All-steel construction, Single Units or banks of two, three, four or five. Stove-enamelled green.

Size of Single Unit
75" High
12" Wide
15" Deep

Type 'B' Double-sided stand with 12" centres. Steelwork stove-enamelled green.

Write for Illustrated catalogues



ABIX
(METAL INDUSTRIES) LTD.
Factory Equipment Specialists
TAYBRIDGE HOUSE, TAYBRIDGE ROAD, BATTERSEA, LONDON, S.W.11
Phone : BAT 8666/7

CALMIC MEDICAL S

- now costs

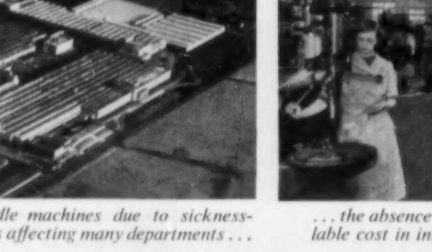
In the first aid treatment of accidents and sudden illnesses, the factory Medical or Welfare Department provides an invaluable service which has direct beneficial effect upon production.

Calmic Limited, of Crewe and London, specialise in the equipment and medical supplies necessary to maintain an efficient modern Welfare Department, large or small, and will gladly send a representative to advise upon essential needs and to arrange for regular medical supplies.

In large industrial plants, idle machines due to sickness-absence can cause bottlenecks affecting many departments . . .

. . . the absence of one key-worker may prove of incalculable cost in interrupting continuity of production.

Absenteeism, a primary cause of concern to the personnel manager, in many cases is preventable.



A fully equipped Medical or Welfare Department, ready for all emergencies from minor ailments to the early treatment of serious accidents. The existence of such a Department directly influences attendance.

INDUSTRIAL MEDICAL SUPPLIES
Calmic Limited
NEW PRICE LIST
1st SEPTEMBER 1955
Crewe Hall · Crewe

Many leading industrial concerns employ CALMIC Service of Supplies listed in this new price list. Available to Medical, Personnel and Welfare Officers.

RVICE TO INDUSTRY

you less!

PRICES OF MEDICAL SUPPLIES IN THIS VITAL BRANCH OF INDUSTRIAL WELFARE ARE REDUCED AS FROM SEPT 1 1955

Increased sales, improved production methods and modern systems of control and administration have all combined to enable us to reduce our costs and it has been our wish that our customers should benefit from these reductions at the earliest opportunity. In pursuance of this policy CALMIC LIMITED have always led the way in reducing the prices of Halibut Liver Oil Capsules. We have now completed a comprehensive review of all our prices and have been able to make a large number of reductions.

AN ENTIRELY NEW PRICE LIST IS AVAILABLE FREE ON REQUEST. IT WILL BE A PLEASURE TO SEND YOU A COPY

Calmic Industrial Medical Service

your answer to sickness-absence

CREWE:
Telephone :
Crewe 3251-5

CALMIC LIMITED
Industrial Medical Division

LONDON:
2 Mansfield Street W.1
Tel: LANgham 8038-9

is your organisation

teaming
with
efficiency ?

The team spirit and staff efficiency go naturally together. There's no better way to fostering the right personnel relationships than by introducing Supercraft overgowns and overalls throughout your organisation. Give your operatives the feeling that you really care about their welfare and they'll begin to care about the company's well being.

Specialists in the tailored overgowns for female personnel, Supercraft use only the best materials cut in figure-flattering styles for smart comfort; while for men there's a hard wearing, good looking range of boiler suits, dust coats and overalls for every purpose. Let us quote you for fitting out your entire organisation the Supercraft way.

ALL SUPERCRAFT MATERIALS ARE
SPUN, WOVEN AND FINISHED IN LANCASHIRE

MADE FROM MATERIALS TESTED IN AN INDEPENDENT LABORATORY

let
supercraft
fit you smartly
in the scheme

have you received
the NEW revised catalalogue

supercraft
1955

if not send now to :

SUPERCRAFT (GARMENTS) LIMITED
Central Sales Office : 19 STRATFORD ROAD, SHIRLEY, BIRMINGHAM
Telephone : Shirley 3809

FACTORIES AT OLDHAM AND MANCHESTER

TRUVOX

Floor maintenance is child's play!

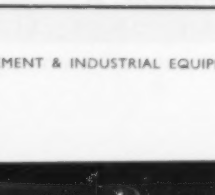
THE NEW SPEEDY

answer to your cleaning problem

TRUVOX
Scrubber-Polisher

TRUVOX
Suction-Dryer

OCO
Polisher/Sweeper



JUNO
Polisher/Scourer

A new and different approach to more efficient floor maintenance . . . new machines designed to solve *your* problems. Free advisory service throughout Great Britain.

A TRUVOX PRODUCT

TRUVOX LIMITED
Sales Office : 15 Lyon Road, Harrow, Middlesex
Harrow 9282
Service and Tech. Depts.: 328 The Broadway, Station Road, Harrow, Middlesex. Harrow 4455

Tx 1100

Don't be wise after the event

Says Master Totector

Many a good 'hand' has been incapacitated through a foot injury which could have been prevented by Totectors. Hundreds of man hours have been lost through failure to pay elementary heed to this simple method of foot safety.

Fortunately, more and more Safety and Welfare Officers are realising that 'Totectors' are the one sure way of keeping accident figures down.

The neatly concealed steel toecap affords excellent protection against foot injury.

Every pair carries the Registered Trade Mark and "Safety First Tag" which distinguish all genuine Totector brand boots and shoes.

insist on **TOTECTORS** REGD. *safety boots and shoes to be sure!*

Write for illustrated brochure and price list showing the complete range of Totectors to:

WILKINS & DENTON LTD. DEPT. P.M. 51-52 WOBURN PLACE, LONDON, WC1

How to keep ABSENTEEISM in check

Help your staff to resist the menace of coughs, colds and similar ailments that all too frequently keep them from work. Even when staff do not "go sick", their work will suffer if their vitality is low.

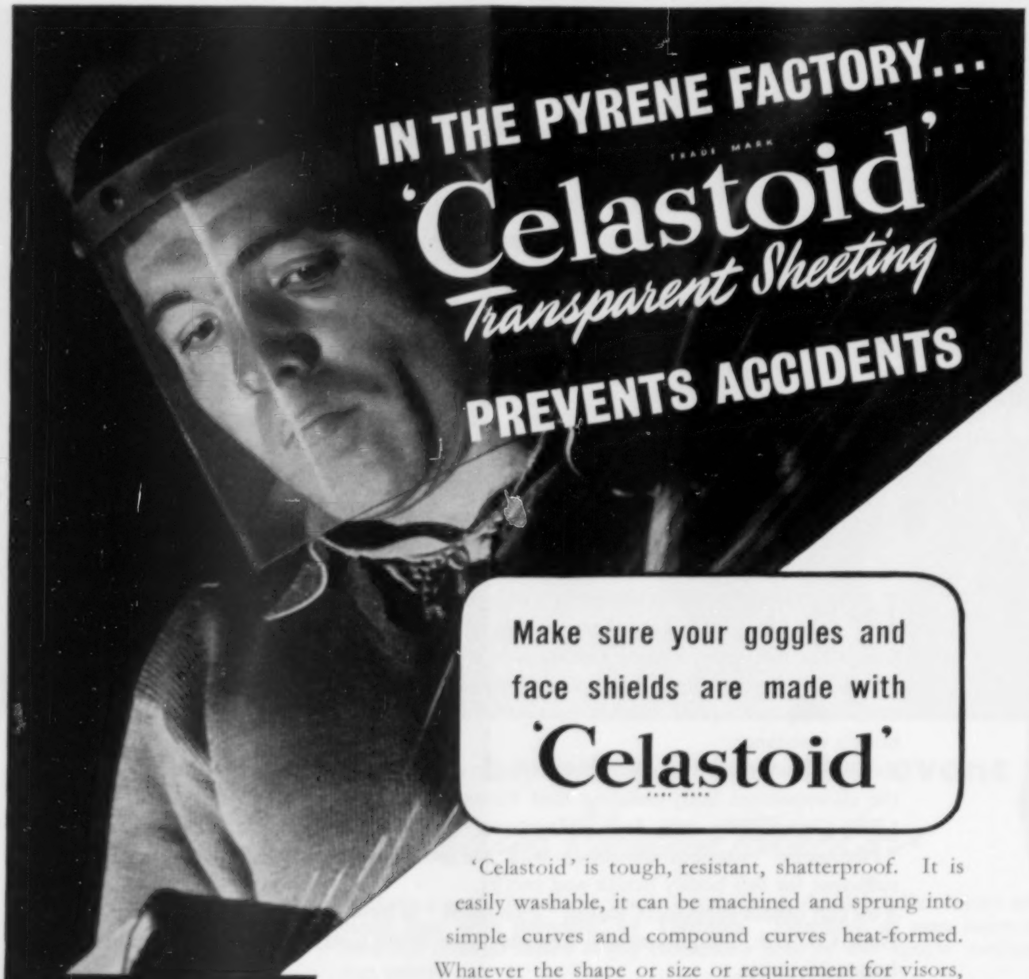
Rexall " Plenamins ", the multi-vitamin capsules, can be of immense benefit in overcoming inadequate vitamin content in diet, which so often undermines the body's resistance.

Rexall " Plenamins " contain no fewer than *eleven* essential vitamins, including the all-important body-building Red Vitamin B_{12}, together with Folic Acid, Liver Concentrate and Iron. Moreover, a regular daily dose of Rexall " Plenamins " supplies the body with the essential vitamins in quantities sufficient for full bodily health and energy.

You can obtain supplies of Rexall " Plenamins " in bulk quantities from Rexall Drug Co. Ltd., Loughborough, Leicestershire. Write today for full details and industrial terms.

Rexall

Plenamins



IN THE PYRENE FACTORY...

TRADE MARK

'Celastoid'

Transparent Sheeting

PREVENTS ACCIDENTS

Make sure your goggles and face shields are made with

'Celastoid'

TRADE MARK

'Celastoid' is tough, resistant, shatterproof. It is easily washable, it can be machined and sprung into simple curves and compound curves heat-formed. Whatever the shape or size or requirement for visors, face shields and goggles, 'Celastoid' is ideal, the proved and tested transparent sheeting to keep danger at a safe distance. Thicknesses from 10/1000 inch to ¼ inch. Write or telephone for free impartial advice on the applications of 'Celastoid.'

The operators in each illustration are wearing face shields made from 'Celastoid' Safety sheeting by Safety Products Ltd.

BRITISH CELANESE LIMITED
Plastics Division
Celanese House, Hanover Square, London, W.1 Mayfair 8000

O SMOKING
Hi-Dri
PAPER TOWELS

Hi-Dri's

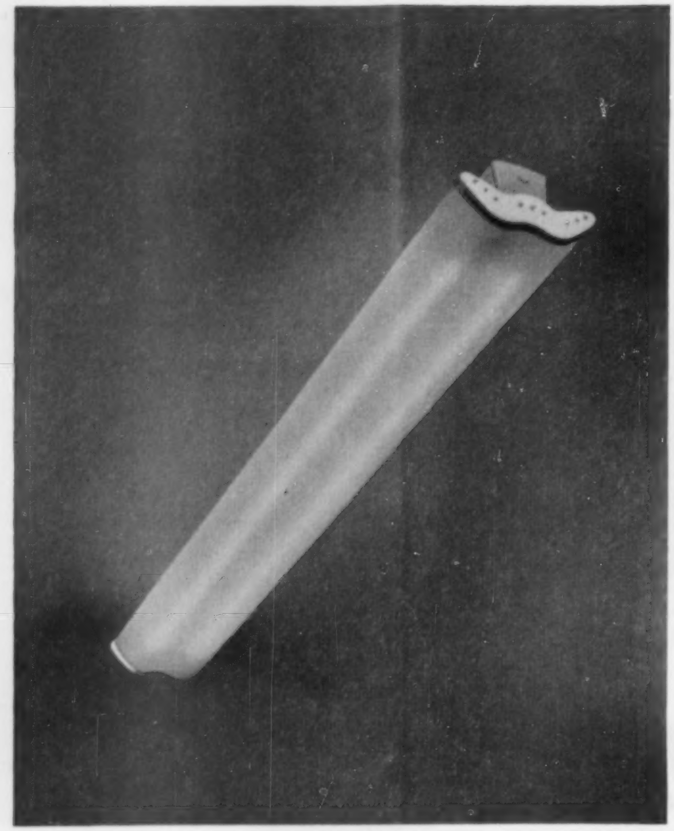
a wise dry

IN THE FACTORY, Hi-Dri Paper Towels make a big contribution to good labour/management relations. Install Hi-Dri at the bench and in the washroom as added protection for the workers' health and efficiency. Hi-Dri washroom service gives a clean towel for *every day*. Just take, use, destroy. No queuing, no waiting, no wasted man-hours ticking away. No laundry bills — but a clean bill of health. Dispenser cabinets supplied free on loan. Hi-Dri representatives call on request.

PHONE FOR A FREE
DEMONSTRATION TODAY
VICtoria 1951/2

Reed

REED PAPER HYGIENE LTD.,
11 GROSVENOR GARDENS, WESTMINSTER, LONDON, S.W.1



Fitting illustrated
F41062/3

You'll be glad it's . . .

- *Each fitting is the result of the closest collaboration between expert designers and lighting engineers.*
- *Each fitting is made to rigid factory standards for long arduous service.*
- *Operating efficiency is guaranteed because the control gear and tubes are made within the G.E.C. organisation.*
- *Consult your contractor for the most suitable G.E.C. fittings . . . with OSRAM tubes of course.*

G.E.C.

• *The General Electric Co. Ltd, Magnet House, Kingsway, London WC2*

When a pension scheme is being considered

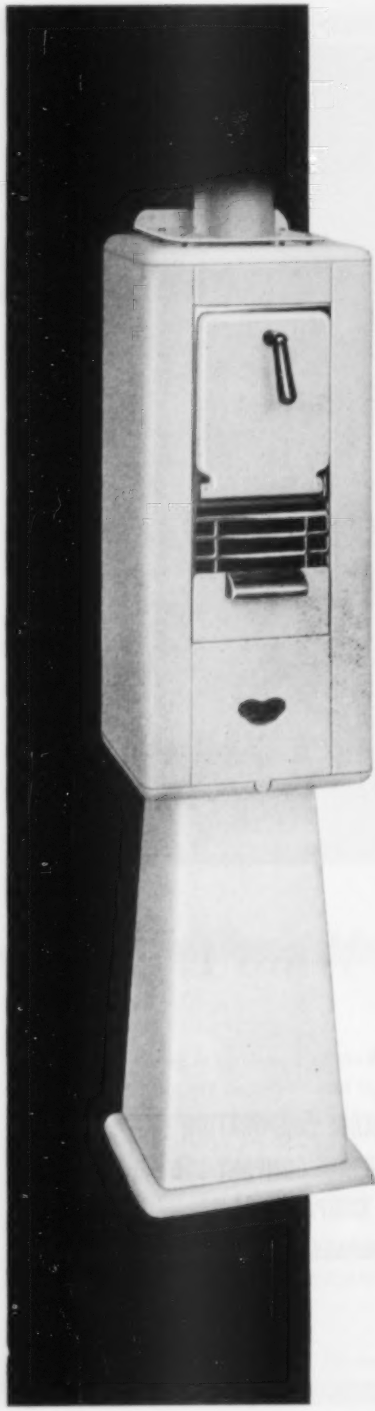
the name to remember is

The General Life

THE GENERAL LIFE ASSURANCE COMPANY
Established 1837
General Buildings, Perth, Scotland

Associated with

GENERAL ACCIDENT FIRE AND LIFE ASSURANCE CORPORATION LTD
ROAD TRANSPORT AND GENERAL INSURANCE COMPANY LTD
SCOTTISH GENERAL INSURANCE COMPANY LTD
THE ENGLISH INSURANCE COMPANY LTD



Safeguard Public Health
Encourage Personal Hygiene

in FACTORIES · HOSPITALS · CLINICS SCHOOLS · HOTELS AND OFFICES

Investment by British industrialists and others in modern equipment to safeguard the health and welfare of the vast and growing numbers of workers, has proved beyond doubt the wisdom of a policy both far seeing and democratic in concept.

The installation of Sugg's incinerators wherever women employees form part of an organisation is plain commonsense.

Our sales and technical staff will be glad to advise and co-operate.

The Sugg Incinerator

Gas-Fired

WILLIAM SUGG & CO. LIMITED
(Incorporating Cowper Penfold & Co. Ltd.)
VINCENT WORKS, REGENCY ST., LONDON, S.W.1 Tel.: VIC 3211

SUGG
WESTMINSTER

Photo: Kings Park Primary School, by courtesy of Glasgow Corporation. Architect: Thomas S. Cordiner, F.R.I.B.A., Glasgow, C.2.

Quiet thought

brings the right answer

'What's the capital of Abysinnia?' 'Addis Ababa, Sir', says Smith Minor promptly. Note how easily he hears and how there's no distracting noise to prevent him giving the right answer. It means that his classroom, like the one illustrated here, is planned *to eliminate unnecessary noise.*

Classrooms which are acoustically correct make for easier and better concentration with less wear and tear on the nerves of both staff and pupils. That's why in schools and colleges all over the world you'll find Acousti-Celotex sound absorbing tiles. They are easily and inexpensively installed and their effect is *permanent* as they can be repainted as often as necessary without impairing their effect. If *you* have a sound problem consult your regional Acousti-Celotex Distributor.

ACOUSTI-CELOTEX ***SOUND ABSORBING TILES***

ANOTHER
CELOTEX CANE FIBRE
PRODUCT

★ *Distributors for London, Southern Counties, Wales, the Midlands and Yorkshire*
HORACE W. CULLUM & CO. LIMITED
8-9 Flowers Mews, London, N.19. Tel: ARC 2662
Distributors for Scotland and Northern Counties
WILLIAM BEARDMORE & COMPANY LTD.
Parkhead Steel Works, Glasgow. Tel: Bridgeton 1881

MADE IN GREAT BRITAIN BY CELOTEX LIMITED, N. CIRCULAR RD., STONEBRIDGE PARK, LONDON, N.W.10. TELEPHONE: ELGAR 5717 (10 LINES)

The door that bends to serve . . .

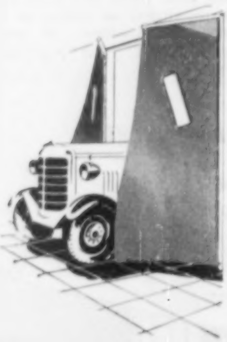
—and SAVE

Flexible Rubber Doors Save time—Save damage to trucks and loads—**Save injuries to personnel.** Can be fitted in pairs or singly to open one way or both ways. A vision aperture is fitted in each panel.

Rubber panels by **DUNLOP** *Rubber Co. Ltd.*

THE BUILDING CENTRE
26 STORE STREET W C I

Demonstration Doors have been installed at The Building Centre, 26, Store Street, London, W.C.1



neway **FLEXIBLE RUBBER DOORS**
PATENT Nos.: 719189/90

The only Rubber Door with the patent Magnetic Catch

For further particulars apply to the manufacturers (Dept. R.D.10)

WILLIAM NEWMAN & SONS LTD., Hospital Street, Birmingham 19

"We like this first delivery, Sir . . .

Not the letters, sir, the coats. Just been issued to us. These never go stiff and sticky, or crack and let in the wet."

CRAYTEX is a new P.V.C. coated fabric made to a specification approved for Post Office protective clothing and other trades where inclement climate or moisture abounds. Garments made from it keep always soft and supple, never become tacky when rolled and folded, never need reproofing. In standard and special colours. Craytex is also made to an Admiralty specification using special plasticisers so that garments remain flexible even under Arctic conditions. Craytex has a high resistance to fire, too.

A Greenwich PRODUCT

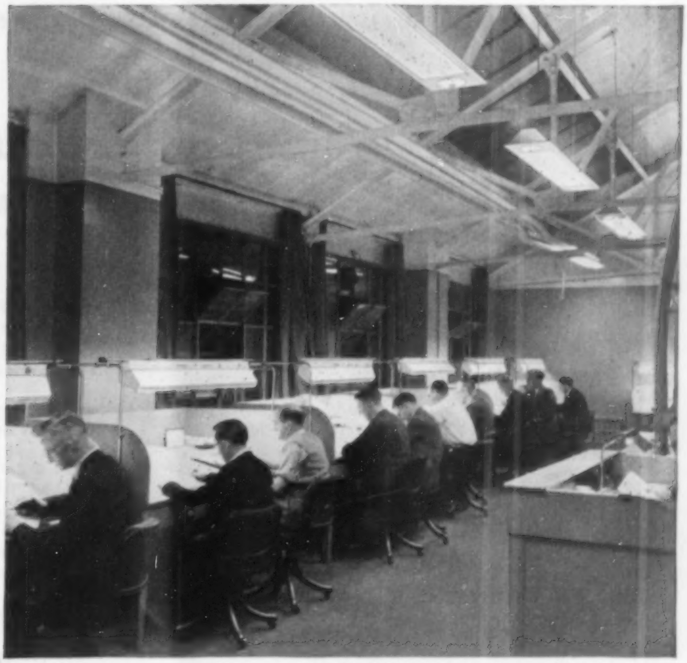
Makers of protective garments are invited to write for fullest information and samples of coated cloths suited to specific needs.

GREENWICH PLASTICS LTD.

ST. MARY CRAY, KENT, ENG. Tel.: Ravensbourne 4674-5 & Orpington 25671-2-3

Badly placed lighting or too little light . . .

causes eye-strain and lowers efficiency



The Readers' Room at Odhams Press, Manchester.

The answer is

BALANCED LIGHTING

designed for the job

FAMOUS ORGANISATIONS THAT HAVE USED PHILIPS LIGHTING DESIGN SERVICE

Shell (for their Southampton Offices)
Waygood Otis
Powers Samas Accounting Machines Ltd.
Steel Company of Wales
Pan American World Airways
K.L.M.
De Havilland Aircraft Co. Ltd.

It stands to reason : you can't get consistently good work out of men who are exposed to any discomfort, however slight. The irritating and tiring effects of poor lighting — whether of too much or too little — are now well known. Balanced lighting is the permanent remedy; lighting, that is, based on a carefully worked out plan according to the individual characteristics of your premises, and the work to be done.
This is where Philips' Lighting Design Service can help you, *free of charge and without obligation.* Their lighting staff has experience of every kind of industrial lighting requirement, and will be glad to co-operate with your own technicians and contractors in devising a comprehensive lighting scheme.
To call in this service, contact your electrical contractor or write direct to Philips.

PHILIPS ELECTRICAL LTD.

LIGHTING DIVISION

CENTURY HOUSE · SHAFTESBURY AVENUE · LONDON · WC2 · TEL: GERRARD 7777

New, practical answers to your problems of:

High staff turnover . . .
Poor productive effort . . .
Unhappy labour relations

- Recent research has discovered one very significant fact for business men:

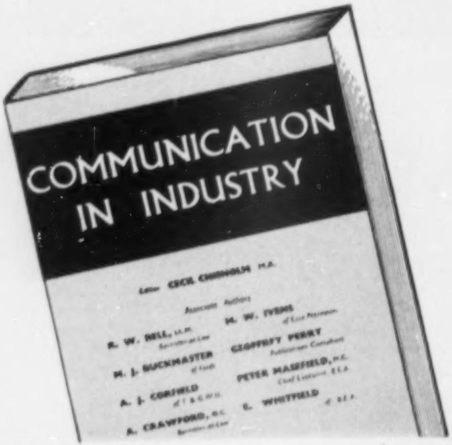
> **Today's unrest and suspicion among so many factory and office employees is caused primarily by the failure of business men and trade union leaders to make themselves *understood.***

COMMUNICATION IN INDUSTRY, just off the press, shows how efficient communication between all levels of workers and management can quickly and effectively help in meeting the problems of high staff turnover; poor productive effort; inconsistencies or weakness in executive drive; staff and labour friction of every type. In it you will find the proved methods and techniques which a few progressive firms, pioneers in this new field of management, are successfully using today.

How well do your executives use the *spoken* word? A whole section explains how to express yourself most effectively. Precise rules for making every *written* word understood are also given. First-hand guidance on successful joint consultation, the discussion group and the conference are provided for practical application.

How the unions are tackling their communication problems is analysed in the light of today's requirements.

How to organise an entirely new system of communication is described in detail by the man who is the first Communication Manager appointed in Britain. Whether your business is large or small, this unique section alone will help you to organise an effective system of communication now.



PARTIAL CONTENTS OF

Communication in Industry

NEW ANSWERS TO OLD PROBLEMS

- Outlining the Problems
- What to Communicate
- Getting an Improved Communication System Going

WRITTEN COMMUNICATION

- Survey of Media Available
- Conveying Your Meaning
- Form, Style, Expression

SPOKEN AND VISUAL COMMUNICATION

- Overcoming the Obstacles to Effective Speech
- Designing the Speech
- Visual Communication
- Meeting Your Opponent in Argument

ORGANISING A COMMUNICATION SYSTEM

- The Interview
- Conducting the Discussion Group Successfully
- Organising a Conference
- Making Joint Consultation Work
- How Unions are Developing their Communication Systems
- Checking Your Communication Methods
- Organising Communication to Get Action

APPENDICES

- A Note on Trade Union History
- The Place of Semantics
- Some Technical Points on the Use of the Voice
- Closed Circuit Television

Progressive firms will want every one of their directors, executives and department heads to read so helpful and practical a book. The techniques it describes, put into practice, cannot fail to improve relations between management and employees.

The first book of its kind— AND IN HEAVY DEMAND!

COMMUNICATION IN INDUSTRY covers a phase of administration never dealt with before in any book published in this country. Within a few days the demand for it has made unexpectedly heavy inroads into the limited edition. Only by ordering *at once* can you be sure of getting a copy. Post the coupon today.

FILL IN AND POST THIS COUPON NOW
and hand or post it to your bookseller

or

To B. T. Batsford Ltd., 15 North Audley Street, London, W.1

Please send me............copy/ies of COMMUNICATION IN INDUSTRY, and invoice me at 35/9d. per copy, post free.

Name ....

Address ....

.... PM 1

Overseas orders must be accompanied by cash, 36/-.

"We think it our most popular amenity...

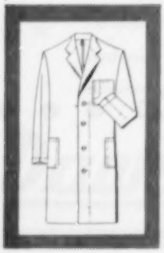
... in fact, the tone of the whole firm has improved since we used the **SKETCHLEY Overall Service."**

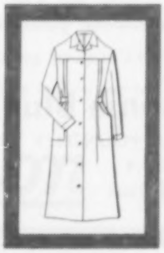
Many business executives say the same. They appreciate the importance of uniform clothing in the factory and offices, and a service which supplies, cleans and repairs garments, giving protection and ensuring hygiene.

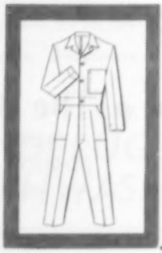
The
Sketchley
SERVICE

The Sketchley service provides a wide range of styles in overalls to meet the varied needs of men and women in office work, shop and factory.

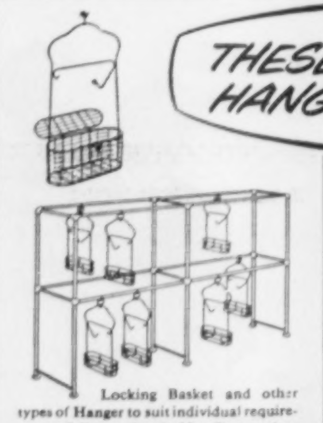
Please write for full details to
Sketchley Ltd., Fox Grove, Old Basford, Nottingham





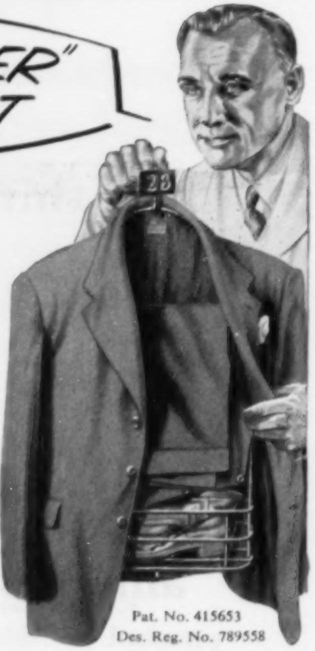


THESE AIR-DRY "SIEBER" HANGERS ARE A TREAT



Locking Basket and other types of **Hanger** to suit individual requirements, fully meeting the New Factory Act.

"At last I can change into dry, uncreased clothing when I go home! It's plain common sense to hang rain-soaked 'togs' on a 'SIEBER' Hanger instead of bundling them into an unventilated, smelly locker. It saved me from many colds and my clothes are fresh and wear better. The boss, too, must like these 'SIEBER' Hangers because they reduce absenteeism and the space he saves is bound to repay the little money they cost. Repair costs? Not on your life, because this Hanger Equipment is made to last for good and all."



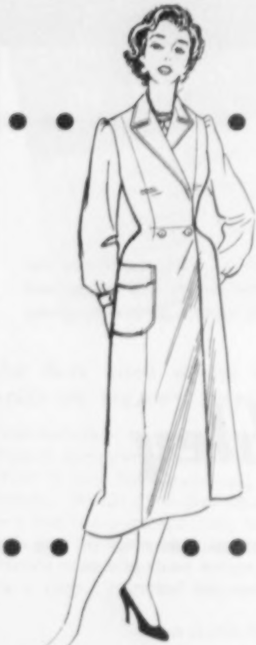
Pat. No. 415653
Des. Reg. No. 789558

SIEBER

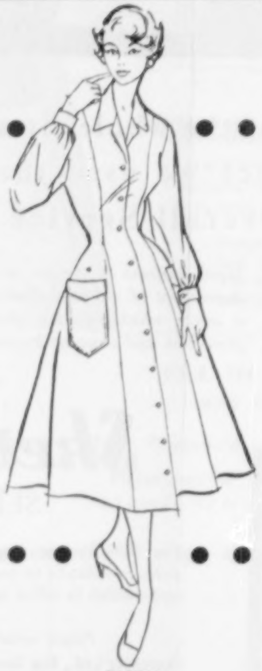
ALL—IN—ONE
HANGER EQUIPMENT

Permanent Exhibit at Health and Safety Centre, London, S.W.1.
Installed in Factories, Offices, Public Undertakings, Schools, Hospitals, etc.
Write today *for full details of our Free Planning Service.*

JAMES SIEBER EQUIPMENT CO. LTD., 30 Africa House, Kingsway, London, W.C.2. Tel.: HOL 4531 & 5121



BETTY



PASCAL

bb *Quality* OVERALLS

BETTY

Double-breasted Crossover Overall with button fastening. Tailored in Rayon, Satin Drill and White Poplin.

PASCAL

S/B tailored overall with half-belt at back. Available in white drill, white and pastel-shaded poplins, and 4 oz. Nylon.

The Bonnie Blue Co

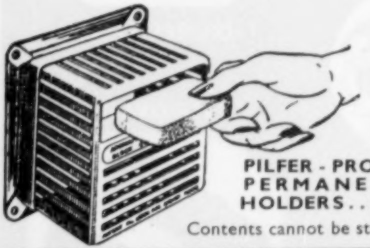
1 LAURENCE POUNTNEY HILL
LONDON, E.C.4
Tel.: MINcing Lane 6665

Banish foul odours—

from Toilet Installations

—inexpensively, with

Aromatic TABLETS



● AROMATIC Tablets are less expensive than liquid disinfectants which are easily washed away or evaporate quickly. They start saving you money immediately they are installed.

PILFER - PROOF
PERMANENT
HOLDERS . . 4/6
Contents cannot be stolen

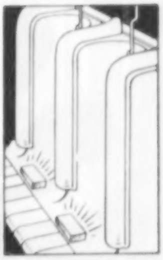
AIR PURIFIER TABLETS AND PATENT PLASTIC HOLDERS

Blocks, 3 doz. **35/-**, 6 doz. **68/-**, Gross **130/-**

CARRIAGE PAID
ON ORDERS
OVER £5

"G" Blocks are insoluble in water, chemically disinfectant and impart a hygienic, fresh odour. Just install and forget.

3 doz. **28/-** 6 doz. **55/-**
Gross **105/-**



"G" BLOCKS FOR GENTS' CHANNELS

Save money—install 'AROMATIC' TABLETS

AROMATIC DISINFECTANT BLOCK CO. LTD.
9 AUGUSTUS ROAD, LONDON, S.W.19. Telephone: Putney 5181

Clean — without a doubt!

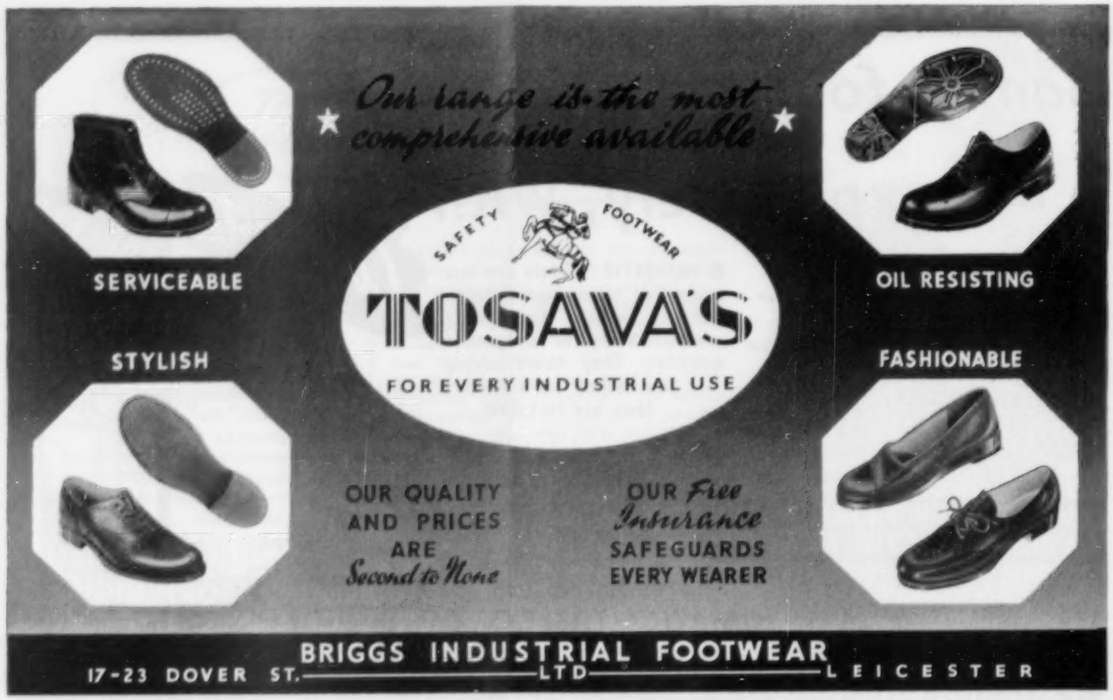
WASHING-UP in Canteen Kitchens

MODERN canteens now handle all the washing up mechanically. The use of DAWSON DISHWASHING MACHINES effects great saving in time, labour costs and absence of breakages. Furthermore all crockery and cutlery washed by Dawson machines satisfies the standards of hygiene demanded to-day.

★ **Dawson Dishwashing machines are made for all size canteens, catering for up to 1,000 meals. Descriptive literature will be sent on request.**

Dawson 'DELUGE' DISHWASHERS

DAWSON BROS. LTD
DEPT. P.M. · 406 RODING LANE SOUTH
WOODFORD GREEN · ESSEX · Tel. Wanstead 7777 (4 lines)


★ *Our range is the most comprehensive available* ★

SERVICEABLE

STYLISH

SAFETY FOOTWEAR

TOSAVA'S

FOR EVERY INDUSTRIAL USE

OIL RESISTING

FASHIONABLE

OUR QUALITY AND PRICES ARE *Second to None*

OUR *Free Insurance* SAFEGUARDS EVERY WEARER

BRIGGS INDUSTRIAL FOOTWEAR LTD

17-23 DOVER ST. LEICESTER

Kennett

Aristocratic Tariffs

Glossy white plastic letters and figures which you simply clip into base grips. Each is solid, washable, almost unbreakable, usable over and over again. Kennett Boards are 5-ply, in black or grey, titled as required, e.g., Tariff, Menu, etc.

Choice of 3 sizes of characters and boards, see below. Send for **FREE Samples** of characters and base grips.

3 sizes of Board, Letters and Figures.

2 ft. × 1 ft. 6 in. (illus.), ¾ in. letters, 1⅜ in. figs., 470 pieces.

1 ft. × 1 ft. 6 in., ¾ in. letters, 1⅜ in. figs., 250 pieces.

1 ft. × 1 ft. 6 in., ⅜ in. letters, ½ in. figs., 470 pieces.

MENU

5/6 LUNCHEON 5/6

MULLIGATAWNY SOUP

ROAST TURKEY & STUFFING

GRILLED HAM & TOMATOES

LAMB CHOPS

CHIPPED OR MASHED POTATOES

PEAS OR CABBAGE

SULTANA PUDDING

APPLE TART & ICE CREAM

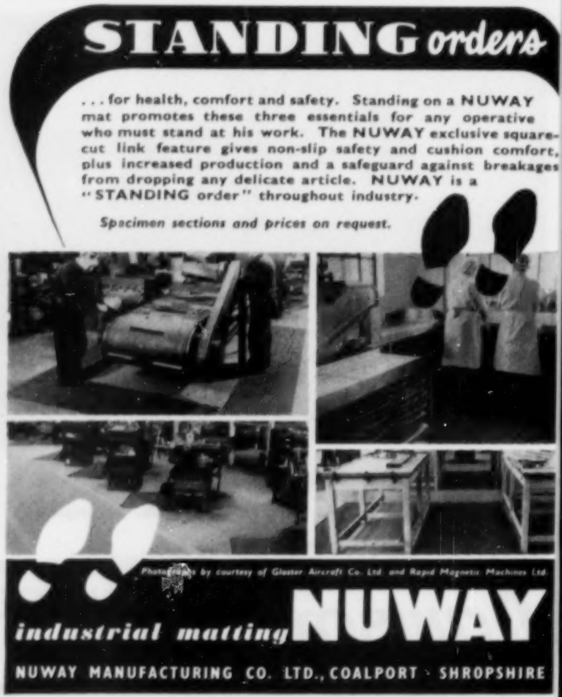
PEACH MELBA

ROLLS 1½d COFFEE 6d

LUNCHEON SERVED 12 NOON 2 PM

Kennett *PRICE MARKERS*

Eastgate Street, Winchester, Hants


STANDING *orders*

. . . for health, comfort and safety. Standing on a NUWAY mat promotes these three essentials for any operative who must stand at his work. The NUWAY exclusive square-cut link feature gives non-slip safety and cushion comfort, plus increased production and a safeguard against breakages from dropping any delicate article. NUWAY is a "STANDING order" throughout industry.

Specimen sections and prices on request.

Photographs by courtesy of Gloster Aircraft Co. Ltd. and Rapid Magnetic Machines Ltd.

industrial matting **NUWAY**

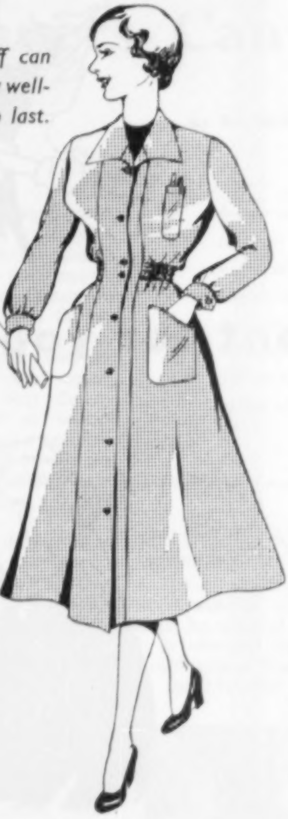
NUWAY MANUFACTURING CO. LTD., COALPORT · SHROPSHIRE

DINKUM REGᴰ

WOMEN'S

COAT OVERALLS

Overalls that your staff can wear with an air! Really well-made garments that do last.



Button Front Style—Long or Short Sleeve—Dirndl Waist—Detachable Buttons. Good Quality Spun Rayon—Crease Resist—Fast Colours.

SIZES
SW. W. WX. OS.

SHADES :—Wine—Reseda—Nigger—Bottle—Butcher—Sky—Beige—Pink—Turquoise—Navy—and White.

Please quote style No. 329.

Manufactured and Distributed by

ANGUS JOWETT & CO. LTD.

SKELTON INDUSTRIAL ESTATE
SALTBURN-BY-THE-SEA, YORKS.

Telephone: Skelton 142. Established 1911.

Southalls

SANTOWELS

automatically yours

When you install Southalls Automatic Machines for santowels in your cloakrooms you provide an essential service for your women staff.

Two types of machine are available—white enamel or solid oak. Designed to work for 2, 3, or 4 pennies, these excellent machines will hold two dozen towels, are guaranteed for one year and are backed by a thorough maintenance service.

Three types of Santowel !

★ *Pins-on* compressed all cotton wool.

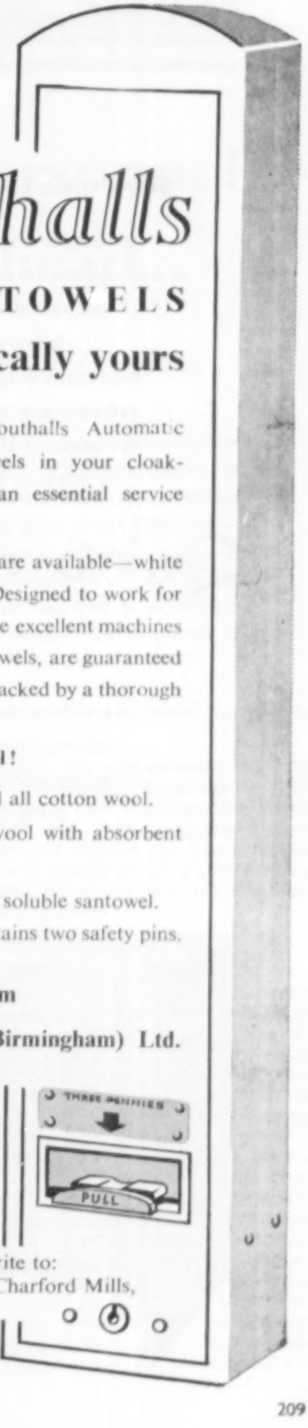
★ *Blue Star* cotton wool with absorbent cellulose centre.

★ *Celtex* a super soft soluble santowel.

Each towel carton contains two safety pins.

Obtainable only from

SOUTHALLS (Birmingham) Ltd.



For full information write to:
Automatic Dept. J.4., Charford Mills,
Birmingham 8.

Save time . . . send up output

Management and staff alike benefit at once by the introduction of Coca-Cola self-service coolers, close by the factory bench or office desk. This means employees can get instant refreshment ice-cold and a welcome lift—without time wasted at all—and so increase productivity all round.

Quick refreshment for your staff

Free installation

Coca-Cola self-service coolers are installed entirely free of charge. They are coin-operated, and every bottle sold brings in profit for your firm or Welfare Fund.

Have a Coke
Coca-Cola
ICE COLD

DRINK
Coca-Cola
TRADE MARK REG.

For further information telephone or write to :—

23 Princes Gate, London, S.W.7 **Telephone : KNIghtsbridge 4571**

BOTTLED IN THE UNITED KINGDOM UNDER THE AUTHORITY OF THE COCA-COLA COMPANY

YOUTH'S "UNREPEATABLE OFFER"

This Service Means Personnel Managers Can Plan Ahead

By ROBERT McKINNON

In the next seven years industry will have a golden opportunity to train its skilled labour of the future. This results from the fact that during this time more and more children will be leaving school at 15. For this reason the work of the Youth Employment Service is going to be of vital importance to personnel managers. Already nine out of every ten children under 16 are seeking the advice of the youth employment officer and here is an account of his work which shows how he and industry can co-operate to the advantage of all concerned.

IN two years' time the population trend in Great Britain is going to present industry with a genuine unrepeatable offer that will enable our factories to pick out and train an ample supply of skilled men for its future needs. For five years—from 1957 to 1962—the chance will be there but it will not come again. The actual position is that during these years the number of school leavers will steadily rise to reach a peak in 1962 when it will be 40 per cent more than today. Thereafter the figures will go down almost, but not quite, as far as before.

Because of this trend, the work of the Youth Employment Service is being thrown into sharp relief and the officials who administer the scheme are particularly anxious that employers and personnel managers should co-operate to the utmost in this work. Co-operation is already very good but the Service is hoping that it will become even better. For, as the Minister of Labour pointed out recently, industry may not yet realise the extent of the opportunity which will be created by the "bulge" now going through the schools.

The Youth Employment Service was started in the early years of this century but since World War II it has been overhauled and given a "new look". Its primary task, however, remains vocational guidance of the young, not papering up the cracks in the structure of our national man-power needs. The Service is there for all school leavers, girls as well as boys, and in the last year or two the grammar schools have also come to use it more and more. Yet it so happens that today, in helping these young people to find their feet in the world, the Service is also performing a sterling task on behalf of industry.

The Youth Employment Service has no powers of compulsion save that it must be notified of all school leavers. It is directed by the Central Youth Employment Executive which reports to the Minister of Labour and consists of his Department and the two Education Departments. The National Youth Employment Council, under its new chairman Lord Coleraine, advises the Executive and there is a network of Youth Employment Committees covering the whole of the country.

The Youth Employment Officer discusses the work of his protégés with the factory manager.

The Field Work

So much for the administrative set-up. The actual field work of the Service is carried out by some 930 youth employment officers of whom about 800 are employed by local education authorities and the remainder by the Ministry of Labour. The first task of these officers is to advise young people on the kind of job which would suit them best, second to find a job for them, and third to advise young people at work on their employment problems until they are 18 years of age. Almost every schoolchild in Great Britain has, if desired, the chance of a personal interview with the youth employment officer. In 1954 about 500,000 young people were in fact interviewed and over 240,000 placed in their first jobs by the Service.

From industry's point of view, then, it will be seen that such officers can be described as middle men between the schoolmaster and the personnel manager. And although theirs is a voluntary organisation they think it best that industry does not go direct to the schools, as they believe that they can save the prospective employer a lot of time and trouble. Public Schools and the grammar schools are still an exception.

How does a typical officer of the Service go about his job? First comes the talk at the school which is given to a group of young people a few months before they are due to leave school. His intention is to start them thinking seriously, if they have not already done so, about the sort of jobs they want. Before or after this talk, the school can play its part. Visits to factories, workshops or offices are often arranged and speakers on specific careers are also asked to give talks.

Next comes the personal interview with each boy or girl before leaving school. The officer discusses with the youngster the kind of work he would like to take up and his parents and teacher are invited to be present. Afterwards, *if he is asked to help*, the youth employment officer will do his best to find the youngster the right type of job. If necessary, he can call upon the regional or national organisation of the Service. He may also be able to use the Special Aptitudes Scheme which is for those young people who have a distinct talent for a particular skilled training or apprenticeship but who cannot get it within travelling distance of their homes. An opening is found, lodgings are obtained and financial help given until trainees can look after themselves. Again, the youth employment office is usually open one evening a week for those who want special advice and help after working hours.

An interesting example of the work of the Service comes from Western Germany where last summer two youth employment officers visited three large schools to give advice to children of men in the Forces. The visit was repeated this year.

To help both young people and their parents and the employment officer as well, the Central Executive has to date produced more than 60 booklets in the *Choice of Careers* series, as well as a number of films. The Executive has also been very active in getting industries to agree nationally on schemes of training or apprenticeship and so far more than a hundred such schemes have been agreed.

Apprenticeships

The ever increasing number of apprenticeship schemes being made available by industry is in fact a development to which the Service is paying special attention. As one of its officials emphasised to me, the attraction of highly paid, unskilled jobs which form the economic soil in which the Teddy Boy mentality so easily takes root is greatly exaggerated. Indeed, the fact that more money is now coming into millions of households means that more and more boys are now in a position to take up these apprenticeship vacancies. Deferment from National Service has proved a definite incentive in this matter too.

Among the latest schemes are those for civil engineering contracting, mining surveyors in the coalmining industry, projectionists in the film exhibition industry, hairdressing, and truck and ladder manufacture.

In the cutlery industry, where a new scheme has also been introduced, the last apprentice signed his indentures in May 1814 shortly before the Act of Parliament was passed under which

---

How The Youth Service Operates

1. THE FIRST APPROACH.
Shortly before boys and girls reach school-leaving age they are given a general talk on employment and training by the Youth Employment Officer. "Choose your job," is his message. "Don't just drift into it."

2. INFORMATION ABOUT CAREERS.
Those about to leave school are helped in a number of ways to choose the right kind of work. Talks by experts are arranged, films are shown, and pamphlets describing careers are available.

3. SEEING FOR THEMSELVES.
The Youth Employment Officer will, at the request of the school, arrange for visits to works and other places of employment so that boys or girls can see for themselves what various jobs are like.

4. THE SCHOOL-LEAVING INTERVIEW.
Those leaving school are invited to discuss their future with the Youth Employment Officer. Their parents, and a member of the school staff, are usually present. The school-leaving report and the Officer's recommendations may be seen by parents.

5. CONTACT WITH EMPLOYERS.
The Youth Employment Officer knows the conditions and opportunities in the area and will always try to place young workers where they are most likely to get on and be happy in their work.

6. SKILLED TRADES.
For those who are keen on taking up a skilled trade, the Youth Employment Officer can give advice on suitable training schemes and can help to make arrangements for an apprenticeship.

7. SPECIAL HELP.
Boys and girls with a special aptitude for skilled jobs for which training is not obtainable locally may be helped financially to get training elsewhere.

8. OUTDOOR JOBS.
A boy from the town may be keen to make his career on the land, or perhaps he wants to go to sea. There are schemes to help such boys, and the Youth Employment Officer can give advice and information.

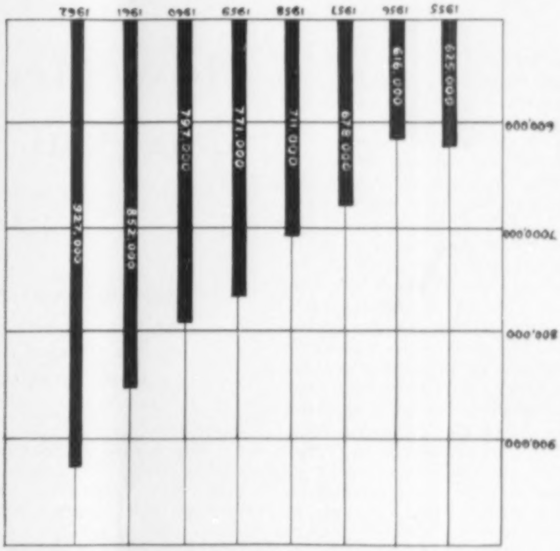
9. FINDING THE JOB.
When the time comes, the Youth Employment Officer will help boys and girls to find suitable jobs with good prospects and conditions. The final choice, however, is up to the young worker and his parents.

10. FURTHER EDUCATION.
Young people determined to get on might benefit from classes dealing with the kind of work they are doing or hope to do. The Youth Employment Officer can tell them about opportunities for general and technical education.

apprenticeship in certain industries ceased to be compulsory. The first apprentice under the new scheme signed his indentures in July, 1955.

Finally, it should be stressed that the Service takes every bit as much care with the mediocre and disabled child as with the gifted and able-bodied. And it is no doubt because of this painstaking, scrupulously impartial attitude that they can point with no little pride to the fact that nine out of every ten children under the age of 16 now apply for a personal interview with their local youth employment officer.

How The 15-Year School Leavers Will Grow



Schemes Approved

THE following are some typical apprenticeship schemes that have been given the blessing of the Central Youth Employment Executive, though of course the actual approval rests with the organisation or association concerned.

British Railways

A training scheme for probationers in the Signals and Telecommunications Department offering promotion to the Lineman or Installer Grades. School leavers of a satisfactory standard are eligible. The normal age of entry is up to 16½ years and the maximum period of training is four years, and in any case does not extend beyond the age of 20.

Dental Technicians

This scheme provides for the systematic training of young persons as dental technicians in hospitals and dental establishments of local authorities. Apprenticeship begins at the minimum school-leaving age and is for a period of five years.

Many young people go back for a chat with their youth employment officer, tell him how they are getting on in their jobs and discuss any problems they may have on their minds.

Hand Frame Knitting

This provides for a four-year apprenticeship for hand frame knitters which may be reduced for boys who remain at school after the normal school-leaving age. The indenture is a four-party agreement between employer, apprentice, parent or guardian and the apprenticeship committee.

Retail Meat Trade

An apprenticeship scheme to provide systematic recruitment and training of young people (girls are specifically included) as fully qualified craftsmen in the retail butchery and pork butchery trades. The age of entry is from 15 to 16 years, or later in approved cases, and training will last for five years or until the apprentice reaches 21.

* * *

These schemes indicate the wide variety of the Youth Employment Executive's interests. They are not concerned simply with guiding children into only the orthodox or traditional ways of earning a living. And that is why the personnel manager, whether his firm makes motor cars or Christmas crackers, should keep the Service informed about his requirements.

How Mechanical Handling Can Cut Down Accidents

By ROBERT MITCHELL

Here is the first of two articles on the part mechanical handling can play in making work safer and more efficient. Among other things, the author stresses the fork truck's immunity to human ills and fatigue and its advantages when it comes to stacking goods.

CARELESS, stupid and over-ambitious manual handling and and stacking of materials is the largest single cause of all industrial accidents and in an average year accounts for well over one quarter of all notifiable injuries. To quote but one instance: in 1953, the Annual Report of the Chief Inspector of Factories stated that the handling of goods caused no fewer than 48,709 out of a total of 181,637 notifiable accidents. In addition, the financial loss was estimated at £19,500,000. That is to say, by eliminating such accidents, the cost of employing another 20,000 workers could have been met.

The problem of reducing handling accidents can be tackled in two main ways. First, by instruction in proper methods of manual lifting and handling (and in this the courses sponsored by the Industrial Welfare Society in conjunction with the Central Council of Physical Recreation should be of great value—see this Journal December, 1954, page 296). Second, by the efficient and intelligent use of mechanical handling equipment with which this series of articles is primarily concerned.

The Report referred to above pinpoints not only the seriousness but the obviousness of the problem by making special reference to the foundry industry where, in 1953, the handling of goods accounted for one-third of all notifiable accidents. It points out that the commonest type of injury consisted of strains. Trapping, between sections of moulding boxes for example, was another common cause, while cuts and abrasions, not otherwise serious, caused many cases of sepsis which rendered the accident notifiable. At the same time factory inspectors commented on the number of elderly foundry workers, whose continued employment as craftsmen is valued presumably for their experience, who sustained hernias from lifting weights or heavy handling. It would appear that such workers, as they grow older, fail to gauge correctly their ability to handle weights. Thus even where large-scale mechanical handling cannot be installed the need for a careful study of handling processes is very acute.

On the face of it, such appliances as industrial trucks, cranes, conveyors and the like might appear more inherently dangerous than the use of limb and muscle. Experience, however, has shown this to be a fallacy.

Handling accidents fall particularly into three types: those that stem from carrying and stacking, e.g. injuries from nails, sharp edges and so forth; those caused by the worker falling over objects placed in a dangerous position or by an insecure stack or pile overbalancing; and ruptures, strains and the like through the worker overtaxing his physical strength.

Much can be done by the worker himself to reduce the possibility of such mishap. Protective clothing such as gloves and steel-toed footwear will reduce scratching and crushing while correct lifting will lessen the chance of strains. At this point, however, the law of large numbers may well begin to operate. A worker may well handle hundreds of separate cases and bundles each day, or many thousands in a year, and it is too much to hope that he will judge correctly in every instance. There will be many times when he is so tired at the end of a day that his concentration is gone; again sometimes it will be so hot that he will not wear his protective clothing.

The Machine Is Immune

This is where mechanical handling takes an important part in industrial safety as well as in efficiency. True, there are operations which can only be done by bodily strength because space is too limited or the operation too specific for a truck to operate. In all other handling operations, however, it should be borne in mind that "mechanical muscles" are much tougher than their human counterparts. They do not suffer from strain, hernias, cuts, scratches or blood poisoning. Moreover, the operator is not seriously fatigued towards the end of a day's work and is still alert to strain dangers. With a modern truck, too, an overload release is often fitted making it impossible for the driver to overtax his vehicle. Should he try to pick up too heavy a load the motor is shut off before damage can be done.

Another factor that is not always taken into account is that handling equipment more often than not leads to a reduction in costs. Sir Walter Puckey, in a recent paper to the Institution of Production Engineers, quoted an example of one firm where 70 per cent of all jobs examined from the safety viewpoint were rendered both safer *and cheaper* by the introduction of mechanical handling.

A typical case is not without interest or significance. It concerns the movement of a tracked fighting vehicle that originally took ten men to manhandle it about the shop; one man with an electric power truck now does the same job (see illustrations). Thus, even if it is assumed that the running costs of the truck are equal to the wages of one man, the wages of the other eight, who can be diverted to man constructive work, are saved. At the same time the single truck driver is much less liable to accident than the team of ten so that the chances of an injury are very considerably reduced—perhaps by a factor of 40 or 50. This, incidentally, is another reason why improved mechanisation often means improved safety: there are many fewer people involved, hence there are fewer people to get hurt.

Apart from handling, three other prolific causes of accidents are "being struck by a falling body" (9.1 per cent of all notifiable accidents in 1953), "persons falling" (15.0 per cent) and "stepping on or striking against objects" (7.8 per cent). These accidents are basically due to bad housekeeping but it is worth examining their causes and how they can be minimised in more detail.

Stacking

With hand stacking, most troubles are caused by misjudgment of the worker. Since each man has to stack according to his own judgment, piles of goods are often built up in a most haphazard way. In particular, there is little attempt to vary the placing of items so that they interlock and give added strength to the whole. As a result, should one item become displaced, the whole pile will fall with disastrous results for anyone below.

When palletised goods are stacked by fork trucks, initial planning ensures that this error is not committed. Not only are the individual items interlocked for stability in a similar manner to bricks in a wall but the intervening pallets isolate successive layers of goods. This again makes for greater stability since any rock caused by brushing against the pile is not transmitted beyond the few items actually contacted. It is even possible (though highly undesirable) to knock several of the items from one of the lower layers of goods without bringing down the whole stack.

The driver of a truck has another big advantage over the worker stacking by hand in that he is protected from any falling bodies to a certain extent by the truck itself. Where desirable, it is even possible to erect a guard over or round the operator without any discomfort to himself.

5 MECHANICAL SAFETY POINTS

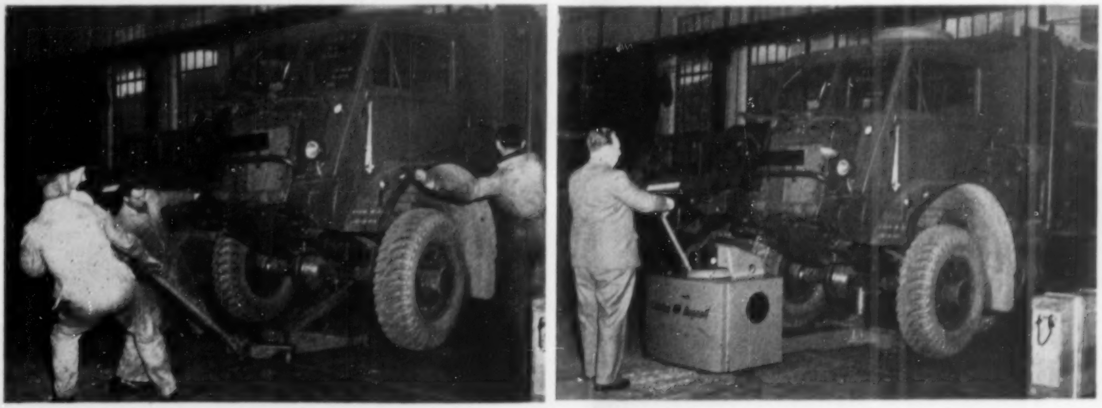
1. **A mechanical handling unit does not suffer from fatigue.**
2. **Modern overload release devices prevent it from attempting too much.**
3. **Fewer people are needed for a handling job, hence there are fewer people to get hurt.**
4. **The driver himself is protected from falling objects by the truck.**
5. **Stacking is made easier and more secure.**

In the above it has been assumed that materials handling equipment can be used without itself causing accidents. Striking confirmation of this was given in a symposium on "Accident Incidence in Ports" held some months ago by the International Cargo Handling Co-ordination Association. The records of accidents given at this symposium covered about 4,000 P.L.A. employees, about half of whom were permanent weekly workers and the rest daily or allocated workers. Special mention was made of the fact that no accidents were due to fork trucks. It was pointed out that "the most promising way of improvement might not be in the direction of imposing irksome restrictions which also acted, incidentally, as an impediment to work. It might well be that attention to the better placing of physical effort and the increasing of mechanisation by the use of fork trucks in the trucking process, would be shown to lead to a reduction in accidents simultaneously with an increase in production."

This emphasis on the increased safety achieved by mechanisation of materials handling does not mean, however, that this can be achieved automatically. The authority quoted above only achieved such outstanding results by the proper training of drivers. For this reason, the next article of the series will deal with essential features of such a training course. In particular, it will be shown how certain firms have achieved safety by instruction in the correct methods of operation rather than by negative prohibitions. In other words, it is more effective to say "lower your forks to within 6 in. of the ground before moving off" than merely to say "drive carefully".

(To be concluded.)

THE HARD WAY *AND* THE EASY WAY



With a hand-operated jack (left) a team of men is needed to manoeuvre a lorry into position. With this electrically powered Lansing Bagnall jack, one man can do the same job. At the same time there is less chance of an accident with one man than with a team.

RoSPA Fees Go Up

FROM the beginning of this month, membership fees for the Industrial Safety Division of the Royal Society for the Prevention of Accidents are to be increased by one guinea. The former rates, which were fixed in 1946, were failing to meet overhead costs which, since 1949, had risen by 70 per cent, the Society announced.

Although their industrial membership was continuing to increase at a steady rate, the gap between membership income and administrative expenditure was widening, with the result that, in the current year, this gap would be of the order of £5,000 at the former rates.

The fee for new members from October 1 is now four guineas, and the additional fee is now three guineas—an increase of one guinea in each case.

Fined Nevertheless

A FEMALE factory worker operated two vertical drilling machines. Her hair was caught in the spindle of one of the machines when she stooped to pick up a piece of work and some of her hair was pulled out.

During the hearing, when the firm was prosecuted under Section 14 of the Factories Act, 1937, it was said that notices were displayed telling employees that if they were not satisfied with the guarding of their machines they should report it to the superintendent. It was added that although caps were provided for the use of female workers these were not always worn. The firm had a good accident record and this was the first time proceedings had been taken against it. The firm was fined. (**RoSPA Bulletin.**)

From Natural Causes

AMASA Parker had two jobs—during the day he was a plumber; at night he clerked in a grocery store. It was while clerking that Parker fainted, fell to the floor, and died of a cerebral haemorrhage.

The night Parker died was an oppressively hot one in Whitfield, New Hampshire. Parker had put in a long, hard day as a plumber before he went to work in the grocery store. The store was poorly ventilated. It was a long, narrow structure, and a number of people were milling around when Parker fainted.

Parker had a history of being extremely susceptible to the heat. He had been overcome by it before. Just two days before his death, he had been taken home from the job due to illness brought on by the heat and over-eating.

The action for death benefits was brought by Parker's administrator. He claimed that Parker's death arose out of and in the course of the employment.

But the New Hampshire Supreme Court did not agree. Parker's death, found the court, arose in the course of the employment, but not out of the employment. The employee was subject to no greater risk or hazard than those who were not employees of the store. There was no evidence that Parker's activity in the grocery caused him to faint—just the heat. The death, therefore, did not arise out of the employment. Claim disallowed. (**Occupational Hazards.**)

Simple Safety Guide

AN instructive and amusingly-illustrated booklet on *The Safe Use of Fork Lift Trucks in Industry* has been published by *I.T.D. Ltd.*, London. It is, in fact, the paper presented at last year's Mechanical Handling Exhibition and Convention by the I.T.D. General Manager, A. C. Cooper, M.S.M.A.

The author draws upon a long experience of designing, manufacturing, selling, and watching fork trucks in operation to spotlight some bad and thoughtless practices, and he lays down some simple rules to help users of these trucks to steer clear of unfortunate pitfalls.

Convenient Symptoms

A STUDY made by the Harvard Medical School, supported by a grant from the *American Mutual Liability Insurance Company*, indicated that out of 36 back injury cases selected at random for close review, 24 involved psychological factors. The four physicians who undertook the study agreed, among other conclusions, that compensation which depends on the continuation of symptoms increases the difficulty of successful medical care. The doctors joined in a recommendation that existing "industrial accident laws and policies" be changed to get around the problem. The period of time for which compensation benefits will be paid constantly is being increased. In some States, medical benefits are already available without limit, precisely as they are in the Canadian province of Ontario.

A Handy Computor for Personnel Work

THE personnel department of an American firm maintains calendar-day records for some 7,000 employees. Until recently, it had to flip through the calendar to find out what day of the month John Doe's leave of absence would end, or his next automatic wage rise would begin.

Now, a new circular computor provides the same information in two-thirds less time than it took to find it on the calendar. The computer, in fact, can project its user to any desired data in the future, or backtrack just as easily to a date in the past. No scratch pad mathematics are required.

A somewhat successful formula, based on three model months—one 28 days, another 30, and the third 31, days long—was developed. Using this formula was faster than using a calendar, but it involved two subtraction problems. The department wanted something better, decided a circular computer would be most practicable and began looking for a precise method for dividing a 360 deg. circle into 365 equal parts.

The machine shop put a jig-borer operator on the job. He centred an 18-inch square sheet of heavy aluminium on his jig-borer table, put a scribing attachment in the spindle, and positioned the turntable's indexing head attachment for proper spacing of indices.

Then, by traversing the table for each mark, the operator scribed 365 evenly-spaced lines in a circular pattern around the aluminium square.

The nine-inch-diameter indexed circle was cut out on a punch press and photographed on to metal template stock. Then the reproduction was placed in a lathe for a precise circular cut which sliced a 1¼-inch ring off the edge of the nine-inch circle.

This cut bisects each of the 365 scribe marks and allows the outer ring to turn independently. Bisected scribe lines on the outer ring coincide perfectly with those on the dial. Both pieces are mounted on a heavy aluminium base, and the inner dial, mounted on a pin, is turned with a twist of a masonite knob. A plexi-glass sweep indicator, attached to the same pin, turns independently.

Index marks on the stationary outer ring are numbered, one through 365. Matching marks on the movable inner circle are grouped into months. And 52 indices on another circle—a five-inch-diameter plexi-glass dial which moves with the larger inner dial—represent weeks of the year. This also is the basis for a Tabulating Department review code.

Thus, when January 1 on the calendar-day circle is aligned with 1 on the outer ring index circle, every calendar day is precisely aligned with its respective day of the month.

The Personnel Department has compiled a book of instructions for applying the Calculator to all types of record-computing problems.

Whenever you think of

COLOUR

(To say nothing of hygiene and lower maintenance costs) think of . . .

. . . FORMICA

LAMINATED PLASTIC REGD.

Beautiful, hard-wearing 'FORMICA' surfaces will brighten your business outlook . . .

AVAILABLE IN OVER 40 COLOURS

Wherever food is packed, sold, cooked or served, you need *hygienic, labour-saving, colourful* 'FORMICA' Laminated Plastic.

HYGIENIC! . . . because 'FORMICA' surfaces are non-porous. They win the approval of Clean Food Authorities since they cannot harbour dirt or germs.

LABOUR-SAVING! . . . because 'FORMICA' surfaces cannot stain in normal use and come clean with the wipe of a damp cloth. *They will cut your cleaning and maintenance costs drastically.*

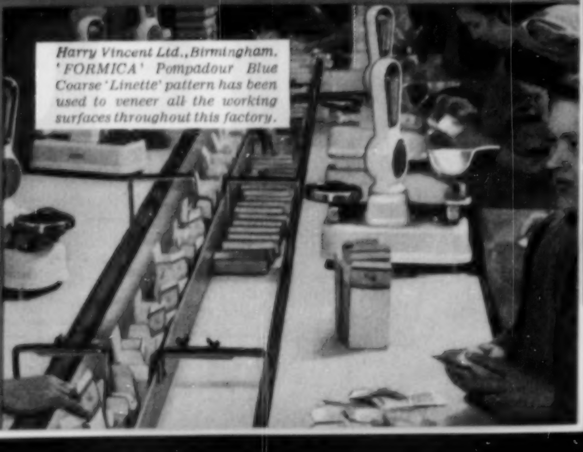
COLOURFUL! . . . because 'FORMICA' surfaces are available in over 40 wonderful colours–the largest colour range of any laminated plastic in the world. The range includes many beautiful woodgrains which are ideal for restaurant tables and panelling.

Managements find that these cheerful, colourful 'FORMICA' surfaces raise the morale of staff and attract customers too. They *look* as hygienic as they are, and there are colours and patterns to suit any decoration scheme. You can choose from the many 'Linette' patterns (an attractive linen finish in pale pastels) . . . the striking 'Capri' range (attractive modern mosaic designs) . . . the many rich, deep 'Softglow' shades . . . and the beautiful Onyx designs. These latter have the look of marble and are perfect for counter tops in shops and stores.

THE COLOUR RANGE INCLUDES:—

BUFF 'LINETTE'
GREEN 'LINETTE'
BLUE 'LINETTE'
PINK 'LINETTE'
GREY 'LINETTE'
CORINTH RED 'LINETTE'
CREAM COARSE 'LINETTE'
POMPADOUR BLUE COARSE 'LINETTE'
WHITE GOLD COARSE 'LINETTE'
OPALINE GREEN COARSE 'LINETTE'
GREEN ONYX
BLUE ONYX
GREY ONYX
BUFF ONYX
RED ONYX
SCARLET RED 'SOFTGLOW'
STEEL BLUE 'SOFTGLOW'
AMULET GREEN 'SOFTGLOW'
IVORY 'SOFTGLOW'
O[illegible]E GREEN 'SOFTGLOW'
DOVE GREY 'SOFTGLOW'
PRIMROSE 'SOFTGLOW'
CORINTH PINK 'SOFTGLOW'
SKY BLUE 'SOFTGLOW'
BLACK
BLEACHED MAHOGANY
BIRD'S EYE MAPLE
STRAIGHT GRAINED WALNUT
PRIMA VERA LUXWOOD
LIGHT MAHOGANY LUXWOOD
BLEACHED GREY LUXWOOD
MEDIUM MAHOGANY LUXWOOD
PRIMROSE 'CAPRI'
RED 'CAPRI'
CHARCOAL 'CAPRI'
GREY 'CAPRI'
SPRUCE 'CAPRI'
COCOA 'CAPRI'

The Ford Motor Company Ltd., Dagenham. Wall panelling in Bird's Eye Maple 'FORMICA' pattern. Bar Front in Straight Grain Walnut 'FORMICA' pattern.



Harry Vincent Ltd., Birmingham. 'FORMICA' Pompadour Blue Coarse 'Linette' pattern has been used to veneer all the working surfaces throughout this factory.

Imperial Chemical Industries. The Refectory at I.C.I. House, Millbank, showing tables veneered with Buff 'Linette' 'FORMICA' Laminated Plastic.

Spear Bros. & Clark Ltd., Bristol. In this factory, 'FORMICA' Green 'Linette' pattern has been used to veneer all surfaces of the work tables (even the legs) thus ensuring complete hygiene.

CANTEENS... FACTORIES... SHOPS ...STORES... RESTAURANTS

FORMICA

LAMINATED PLASTIC REGD.

it is now much easier to obtain . . .

There has recently been a very great increase in the number of Approved Distributors of 'FORMICA' Laminated Plastic throughout Britain. Whatever your requirements–whether for counter tops, shelves, tables or panelling, in restaurants, stores or factories—these Distributors will be pleased to give advice and supply all the 'FORMICA' material you need.

will cost you less than ever before . . .

The cost of 'FORMICA' installations is far less than you think . . . and now *less than ever before* because of the price reduction earlier this year.

and will prove a lasting investment

'FORMICA' surfaces have a cost per year of service which is lower than that of any known material. Once they are fixed, they cannot chip or crack, and they are heat-resistant up to 266°F. *In fact, you will find your 'FORMICA' installation a permanent investment.* Not only will it greatly reduce your cleaning and maintenance costs but it will remove the need for re-decoration throughout years and years of service!

How to get and fit FORMICA

If you have a major project on hand, get in touch with the Distributor nearest to you. If you wish to do the job yourself and only need a sheet or two for a few counter tops you will find what you want at any good hardware store or builders' merchant. 'FORMICA' panels can be easily and quickly fitted provided the simple instructions are followed and the De La Rue Domestic Adhesive is used.

FREE **If you will send your business card to Thomas De La Rue & Co. Ltd. we will send you full information and if you wish, the name and address of your nearest 'FORMICA' expert.**

REMOVE WITH SOAP AND WATER

Look for this 'FORMICA' identification stamp

. . . it now appears in a repeating pattern on every sheet of 'FORMICA' Laminated Plastic. It is your guarantee of the highest quality and the longest life. *(The stamp washes off easily with soap and water).*

the surface with a smile

TECHNICAL INFORMATION SERVICE

Let us advise you . . .

The De La Rue Technical Information Service will be happy to consult with you and give expert advice on the application and fitting of 'FORMICA' Laminated Plastic to all types of horizontal and vertical surfaces.

Please inform us of your particular requirements and we will gladly arrange for our Representative to visit you. Just write or telephone to the Technical Information Service Department, Thomas De La Rue & Co. Ltd., 84-86 Regent Street, London, W.1. Telephone: REGent 2901.

FORMICA LAMINATED PLASTIC REGD. *means business*

'FORMICA' and 'LINETTE' are Registered Trade Marks.

WRITE FOR FULL INFORMATION TO THOMAS DE LA RUE & CO. LTD. (PLASTICS DIVISION)
DEPT. Q. 85, 84-86 REGENT STREET, LONDON, W.1. TELEPHONE: REGENT 2901

Do Your Notice Boards Catch The Eye?

Or Are They Passed Unread?

YOUR many letters on the subject of notice boards make this our topic for discussion this month—especially as one member of our group has been inspired to break into verse on the subject! Mr. A. Brailsford Dean (who always has something interesting to say) suggests that different kinds of posters require different approaches.

Thus it is that advertisements in tubes and buses, where people have time to stare, may "contain an amount of detail which would be ineffective on a poster displayed in a street or in a factory". He then continues: "Just as the two different techniques are required for tube and outdoor poster work, I think a third one is very necessary for industrial notice boards.

"It was for years the practice in a large textile factory to place notices on small boards, walls or in windows with little or no planning and these were often on display until some person thought to tear them down. There was no thought given to positioning, timing, etc. Such was the untidy appearance of the factory that it was decided to take the matter in hand, with partly successful results.

"Large boards, 6 ft. by 4 ft., surrounded with a coloured edging, of a material which would allow the use of drawing pins, were placed in well-planned positions; for example, under good lights, with plenty of open space around, and where they would be passed repeatedly by the workers. On these boards were displayed all notices which had the prior approval of the management. Some were connected with welfare, the various sports clubs, education, labour matters and so on. Yes, they were successful in keeping the rooms neat and tidy but from an advertising angle there still was to be found quite a lot of hostile consumer reaction which you refer to in your article.

"Perhaps it was because the notices were very much the same, run off on duplicating machines, in typing or semi-professional lettering. Black and white and still more black and white and almost always the same size!

"This was overcome to a surprising degree by introducing colour. With the aid of a pair of scissors, old weekly magazines and paste, illustrations were fixed to the actual notices, and so attracted attention. The notices, too, were printed on various pieces of differently coloured paper. Even the placing of a notice on the slant drew attention. They were changed frequently and not allowed to remain after the event. Official jargon was dropped and snappy copy used. Here was notice board 'with emotional appeal, lay out and wording', attractive at no extra expense and with power to pull at least an extra 50 per cent of the work people to read the news."

Mr. Alan Bird, personnel manager of *Price Brothers & Co. Ltd.*, Wellington, Somerset, also has some practical suggestions. He writes:—

"I very much agree that the official factory notice board is almost completely ignored—the only readers are usually visitors who no doubt find it all very interesting! The notice placed on the departmental notice board has a much greater chance of being read, but even this is uncertain. I have found that with an important notice the following methods have proved successful.

1. Announcing it over the factory broadcasting system. By this I mean announcing that there is such and such a notice which I should like to bring to the attention of employees. This is more reliable than giving the whole notice over the air. This often results in the person who asks 'What did he say?' receiving a very distorted account which has been passed from mouth to mouth, ending very much like the General's message!

2. Using the factory grape-vine, though this has all the dangers mentioned above. It is essential, therefore, to back this method with notices in each department.

3. Placing the notice on a board in the middle of the canteen counter. This is the most successful method of all, at least in my experience. Employees are always rather fearful that canteen prices may be increased and read the notice with 'light of battle in their eyes'. In no circumstances must more than one notice at a time be used in this method.

To notice a notice
You'll notice is not
The sort of ambition
That falls to John's lot;
But when to his canteen
He hurriedly goes,
He fears a price increase
Will add to his woes:
And so, with Alacrity,
(That's his girl friend),
He scans the signed notice
And reads to the end.
His relief is unmingled
With joy or dismay,
When he finds that the notice
Has nothing to say!"

It seems to me that both Mr. Brailsford Dean and Mr. Bird have outlined some most excellent and practical techniques for making the notice board catch the eye of the passer-by. I wonder, though, how the man we quoted in the July issue would react to these techniques? Do you remember he said: "When I was in the Services they *made* me read notice boards, so when I was a free agent I said they can keep their notices. They can tell me if they want me to know."

Techniques alone will not change this man's hostile attitude, which is probably part of a wider and more deep rooted resentment of people in authority. If we resent and suspect "them" we will make it a point of honour *not* to read voluntarily what "they" are trying to communicate to us. If we dislike "them" very

Interest Depends On You

Notice boards are a useful means of internal communication. So often, says Discussion Leader, bad placing, display and out-of-date notices drive off potential readers rather than attract them. There are good and bad methods of telling people what you want them to know. Does your staff rush to the notice board or pass it without a glance? Your views and experiences are welcomed and, as usual, the author of each letter published will receive one guinea.

much we will do what one reader of a notice did recently. He tore the notice off the board and stamped on it. It is possible that attitudes to notice boards are one more aspect of the wider relationship between management and workers and provide a wide-awake management with one more way of measuring the "climate" of human relations in their undertaking. If this is so, "techniques" for putting notices across are of most use in those concerns where favourable attitudes already exist.

Mr. G. C. Batho, a member of the Personnel Department of "Shell", Shell Haven, puts up a spirited defence of verbosity and long-winded methods of expression. He says:—

> "I think you have got this all wrong—it depends on circumstances. For instance, in the home when sonny blows in, leaving the door open without wiping his feet, he might be told: 'Young man, please take note that you have neglected to secure the portal of entry and egress, thereby allowing variations of the atmosphere by reason of displacement of air-currents, giving rise to general discomfort, and you have neglected to make proper use of the amenity provided to enable you to remove the soiling elements which you have brought in with you, from the soles of your footwear'. Alternatively, he might be told: 'Boy shut that —— door: there's a draught, and next time, wipe your feet'. But of course that is all right in the home. Sometimes dignity of address is very necessary.
>
> "When writing a business letter, for example, it is most essential to give the right atmosphere. 'We have to acknowledge receipt of your communication of the 5th instant, and in connection with the above matter, we would say this is receiving our attention and you will be duly advised at the conclusion of our consideration of the points you have outlined'. Pompous? Certainly not! By the time the reader has got up to the word 'outlined' he feels privileged to receive such a business-like 'communication'. It would be so crude simply to say 'We acknowledge your letter of the 5th instant and will advise you after careful consideration'."

Well, you may have got something there, as true Americans say. Simplicity may not always be best. Perhaps the truth of the matter is that the use of elaborate English can be successful provided we know what we are aiming at and why we are using it. Too often we use it only to hide our ignorance.

Nevertheless, unclear or woolly language is often an indication of unclear and woolly thoughts. Would you agree with this amendment to your remarks, Mr. Batho?

DISCUSSION LEADER

STAFF SELECTION IN A SELLER'S MARKET—3

How To Use Tests When Choosing Skilled Labour

By ELIZABETH SIDNEY

In this third article of the series the writer argues that there is still too much suspicion of selection tests. One way of overcoming this prejudice would be for personnel officers to design their own tests. A distinction should also be drawn between tests for skill and those that measure aptitude.

SOME years ago I went round the workshops of a famous tailoring firm in Savile Row. In a nook by himself sat an elderly journeyman tailor who specialised in stitching a certain kind of shoulder. When I was introduced to him he nodded but said nothing. "Mr. Harrow doesn't talk much", said my guide; "most days he doesn't say more than 'good morning' and 'good evening'. But I should think he's one of the best tailors in Britain."

Mr. Harrow's job, like many in the craft industries, in some clerical departments and in various branches of engineering, needs a great deal of technical skill but not much social ability.

Probably the most effective form of selection for these jobs would be a well-designed test of aptitude for trainees, and of skill for trained men. In these cases, the interview, which is often administratively necessary, would only need to supplement the information supplied by the test results.

However, I doubt whether the idea of selecting boys to learn tailoring on the basis of a standard aptitude test would appeal to the management of Mr. Harrow's firm. Like many famous (and many less famous) firms in the craft industries, they are conservative in their personnel methods and doubtful whether new schemes could help them.

This is one reason why we are short of evidence about tests as a method of selection for many skilled jobs. The evidence there is suggests that for certain jobs a well-designed test is at least as reliable as an interview. Some American firms have found this in checking their test results against their other methods of selection and then against the applicant's subsequent performance. Of course many British firms do use tests as part of their selection procedure. One large aircraft factory, for example, uses two tests, one measuring knowledge of engineering and the other measuring aptitude in solving mechanical problems, in selecting boys to become engineering apprentices. A hosiery firm relies a fair amount on the results of two dexterity tests in selecting girls to train as linkers. But generally speaking we are conservative about this form of selection and put less reliance upon it than we usefully might.

Matter Of Psychology

My experience is that many people in firms which are interested in scientific selection are still suspicious of tests. "They may be all right but they won't work in our place", as the works manager of a sweet factory put it. At the same time people who would feel insulted if told they were working to the principles of psychological testing have introduced amateur tests into their own selection methods. The foreman on a building site gives new workers a simple test of trade knowledge:

"They say they've worked on building before and you don't know what that means. I say: 'All right, let's see what you know. What's this?'—And I show them a hod. Then I say: 'What's this?'—And I show them a bat. That gives me an idea of what they really have done."

The manager of a butchery department in a large food factory has been using tests of skill in his selection procedures for years:

"I ask where a man has worked before: that tells me a lot about whether he has learned to be a good butcher. Then I take him into the shop and give him a piece of meat to prepare. I can tell by the way he sets about it whether he's a real cutter."

An accountant in charge of the office of a provision firm has introduced a test into his selection methods to find out whether applicants have any aptitude for the work he wants done:

"We have to have girls who are quick and accurate with figures. So I just give them a page of our books to add up. I copied one out and I always use it. I've done it so often now that I know what's good time."

The best tests only differ from these examples in degree, rather than kind. A test of knowledge of carpentry consists of a series of drawings of carpenter's tools which the applicant is asked to name. The idea is the same as that of the building foreman, but the test is a more accurate measure of knowledge because it was more carefully designed. The drawings were prepared after studying the range of tools known and used by many expert carpenters. All applicants who take the test answer the same questions in the same conditions. Their performance is not assessed by the tester in the light of his experience, but in comparison with the scores of experts, beginners and workers in unrelated jobs, who took the test when it was being developed and so provided a scale of normal standards.

A trade test may consist of questions rather than drawings. If it is well designed, the questions will be simple and straightforward; they will ask for short specific answers, and they will ask for more than "Yes" or "No." These tests can be given orally and included in the selection interview — but the interviewer must keep to the exact wording if he wants a reply which he can safely compare with any standard score.

The tests of trade knowledge described here are at an elementary level. Tests of this sort are used in selecting apprentices, on the assumption that a boy who is interested in the subject will have studied it and will know something about it. They may also help a personnel officer to make an accurate assessment of levels of training for some semi-skilled jobs. They are tests of experience, not of academic learning.

PERSONNEL OFFICER
Smythe

"YOU WILL INDEED HAVE THE OPPORTUNITY TO RISE, — YOU OPEN THE FACTORY GATE AT SIX EVERY MORNING"

(Courtesy David Brown Newsletter)

Equal Chance For All

Good tests, however, are independent of the special knowledge of the tester, apart from the knowledge of how to administer the test itself. An example of a good skill test which many personnel officers have used—or have asked the office manager to administer—is a Pitman's Shorthand Test. The material is the same for everyone; some at least of the conditions in which it is administered are controlled—and the scores against which to compare a girl's performance are well established.

For another large group of jobs, the selector is not concerned with knowledge or skill but with whether the applicant has any natural ability for the work. These abilities are generally called aptitudes.

It is not easy to design good aptitude tests, although they can be extremely useful to the selector. A good aptitude test does not rely on any previous special training the applicant may have had. For example, the accountant who tested girls with a page of addition was relying on their past schooling. Since most girls applying for book-keeping or clerical jobs have had a reasonable schooling, it did not matter that he perhaps missed one or two who had some aptitude for figures, but whose teaching in school had been poor. But in other situations the selector cannot rely on such a general standard of past experience.

Where things become more difficult is perhaps best illustrated by example. Some two years ago, a personnel officer I know took over the selection of girls to do intricate assembly work in a medium sized factory. He found that girls who appeared to match the job specification when interviewed did very variably in training and that a high proportion left before going on to production. He went over the job again, studied the training snags and the way the good operatives did their work, and came to the conclusion that a special aptitude was needed which had not been allowed for in selection. All the good operatives had the ability to learn a long, intricate and meaningless series of actions.

Eventually he designed a test which had nothing to do with the job but which measured this particular aptitude. His test was a perforated board with pegs inserted in the holes. Underneath was a base marked with numbers, so spaced that whenever a peg was removed a single number appeared beneath. There were 25 pegs and the numbers ran from 1 to 25, but were not in any order. The applicant removed each peg and read the number. Then the pegs were replaced. At her second and later trials she tried to take the pegs out in order of the numbers appearing beneath. This test was first tried out on existing operatives and was found to distinguish between good and poor performers. The personnel officer has used it in selection since then and now has enough results to follow up. He has found that the test distinguishes with a high degree of accuracy between successful operatives and failures.

It seems to me a pity that so many selectors are wary of tests. I think they would be less so if they had a hand in designing their own as this personnel officer has done. There are several institutions which can give advice and guidance to any firms interested in doing this. And I think both selectors and applicants might be more interested in tests if they realised how much they can contribute towards a fair assessment of an individual's qualities.

(*To be continued.*)

Management At Work

Moral Leadership

A DIRECTOR of a well-known engineering firm, visiting the week-end course for his company's foremen at Ashridge College, Berks., was rather surprised when he found them all kneeling together in the chapel, in prayer. That aspect of their lives had not previously impressed itself upon him. When so much emphasis is being placed today on the techniques of management, it is worth more than a passing thought that the courses for industrial "middle management" held at Ashridge put a considerable amount of emphasis on the moral aspects of leadership.

This, of course, is not easy to do. There would be no great difficulty in repeating platitudes about the importance of good leadership, but to stand up and give a lecture on the meaning of leadership, on the moral responsibilities involved and on the qualities needed in a leader is something which most speakers would fight shy of. In his attitude towards this work, Admiral Sir Denis Boyd, principal of the College, is no exception, and yet he does in fact give such a lecture to every industrial course held at Ashridge. Last year 163 firms sent 700 members of their staffs to the College. **(Business.)**

Scientists' Viewpoint

THREE points raised by speakers at the opening session of the 117th annual meeting of the British Association for the Advancement of Science, last month, dealt with the training of apprentices, the danger of factory dust, and the part which could be played by factory foremen in the efficient running of a business.

Mr. Alec Rodger, Reader in Psychology at Birkbeck College, addressing the psychology section, said that apprentice training in its commonest forms was wasteful. Many able boys were precluded from entering some apprenticeships because they remained at school beyond the upper age limit for acceptance. They were being lost to trades that needed them.

"We need a thorough examination of the system and all the good and bad restrictive practices associated with it," he said. "Let us face the fact that many apprentices are not being trained in a profitable way; that these young men often waste their time; that they are often kept on particular jobs far too long because production is given priority over training; and that they often stand no chance of gaining the breadth of experience the potential journeyman should have."

Mr. S. Smith, Government Inspector of Factories, told the physiology section that one major problem in dealing with protection against inhalation of industrial dust was the cure or alleviation of pneumoconiosis. But the last 50 years had produced such miracles that one was not extravagantly foolish in hoping that the answer might one day be found, he said.

The workman, he said, had a great temptation to discard his respirator, particularly if the danger was not obvious. Some "respirators"—mere pieces of sponge in the nostrils or muslin round the mouth—were not necessarily effective.

Factory foremen could help towards the efficient running of a business, said Dr. F. A. Wells, head of the Industrial Economics Department of Nottingham University, in an address to the economics section.

The accuracy of factory records could be greatly improved with the co-operation of foremen, who should be given a better understanding of the use of these records in the efficient running of a business.

He emphasised that wage incentive schemes were no substitute for good management. "In some ways they increase the responsibilities of management at all levels, and particularly at the departmental level," he said.

America Leads

MANAGEMENT in the United States was indisputably more effective than in this country, said Mr. N. H. Leyland, Fellow and lecturer in economics at Brasenose College, Oxford, at the Oxford University business summer school.

The attitude of the trade unions was one of the great differences between the characteristics of American and British labour, he said. "In American union life there is a scale from the angels to the devils, but in this country we may say there are not any angels."

Because British trade unions were still largely "Luddite-minded" and regarded it as their task to preserve the same number of jobs in the same industry with a higher standard of living, a number of restrictive practices—difficult to pin down, but undoubtedly existing—had resulted, he said.

It was fundamental for the Government to maintain full employment, otherwise the unions would never be persuaded to give up their restrictive practices. Then steps to increase productivity could be ruthlessly enforced.

Baby Sitters

A MODERN play centre, with a trained nurse to take care of children on holiday whose parents are working at the factory, has been set up at Smedley's Lady Dane Cannery, Faversham. The centre is in a bungalow adjoining the factory and the main room is decorated with nursery pictures and furnished with play tables.

About 25 children, aged between five and 11, are looked after daily. They are given meals in the canteen and, if their parents are working overtime at the factory, can stay as late as 7 p.m.

Most of them come from a nearby housing estate. Their mothers—many of them working as canners at the factory—would have had to stay at home to look after them had not the play centre been opened. The factory, working at top pitch in the peak of the canning season, needs all the labour it can get.

The children arrive at the factory at 8.30 a.m. They are allowed to play in certain parts of the factory grounds and a nearby public recreation ground as well as in the play room.

B.I.M. On Science

THE theme of this year's British Institute of Management national conference, to be held at Harrogate from November 2 to November 4, will be "The Impact of Science on Management in the Future".

Among the speakers who have already agreed to address the conference are John Diebold, American pioneer of the application of automation, Sir Geoffrey Vickers, V.C., and Sir Charles Goodeve, Director of the British Iron and Steel Research Association.

Provision is being made for 1,000 top managers to be received at Harrogate as delegates. A programme is being prepared which will include two plenary sessions and 24 sectional meetings devoted to specialised aspects of management.

Fuel Economy

IN the light of recent coal price increases, further emphasis has been given to the need for fuel economy. The Board of Directors of the National Industrial Fuel Efficiency Service are convinced that the quickest way to achieve economy, and at the same time cut fuel costs this winter, is to make sure that all boiler operators are properly trained.

The N.I.F.E.S. have produced a brochure on the training of boiler operators. Entitled "Cut Fuel Costs By

Training Boiler Operators", it gives details of the courses of instruction which are available throughout the country at technical colleges.

It also announces the new N.I.F.E.S. course of training for boiler operators, which is to be started in October. The course is based on a new concept in that organised practical instruction is to be given to the men on site at convenient centres. The course will consist of seven whole days of practical instruction at three-week intervals, supplemented by home-study material posted to each student.

Speedy Reading

METHODS by which the average reading speed of two groups of business executives and professional men was improved 80 per cent after 20 hours' instruction were described recently by Mr. R. T. Strayton, assistant education and training officer of the Metals Division of *I.C.I.* Instruction was given by means of films which flashed up groups of words in sequence for brief and regular intervals, the rest of the page being blurred. Speeds increased from 180 words per minute to 470 words per minute. This was achieved by widening the reader's eyespan, eliminating the habits of regression and of saying the words as they were read.

Emergency Kitchen

DUMFRIES and Powfoot canteen supervisors and staff of the I.C.I. (Nobel Division) saw last month what they might be called upon to use if an emergency arises. Outside Dumfries factory was set up a field "kitchen" which had been demonstrated to supervisors from most of the Division factories earlier this year.

The Division Catering Officer, Mr. A. B. Galloway, showed how primitive equipment can be devised from bricks and debris to be found to hand in any factory area. Other equipment which would be available for an emergency, such as the hydra burner, and the soyer boilers, were shown. The equipment will be demonstrated in due course throughout the Division to the various canteen staffs.

Social Skills

TWO courses in the Social Skills of Management are to start at the Polytechnic, Regent Street, this month. The courses, the first of which were launched three years ago, are designed to give a thorough grounding in the scientific approach to human behaviour together with practical training in the skills which make for successful handling of human situations.

The courses consist of three fortnights of full-time attendance, linked by field work which the course members conduct when back at their jobs.

The Department of Management Studies of the Polytechnic realise that the courses make considerable demands on the time and effort of those taking part. They feel, however, that a shorter course in the subject would be unlikely to be thorough enough for executives who hold, or are intended for, positions of real responsibility.

Managements Confer

A SERIES of conferences, with the object of clarifying and strengthening the quality of management practices, are being held at the training centre at Esso House, near Abingdon.

Particular attention is being devoted to problems of human relations, sound organisation, administration, and communications. The principles of management developed are being examined and emphasis is laid on the art of appraising and interviewing employees.

Delegates attending the conferences are drawn from senior managers from all branches of the Esso organisation. At the first conference the guest speakers included Major-General Russell, the General Manager of British Road Services, and Mr. E. P. Harries, formerly Production Officer of the T.U.C. and secretary of the T.U.C. Organisation Department.

Case studies were prepared and presented by Mr. Norman Rimmer, Director of Studies, British Institute of Management, and Dr. P. S. de Q. Cabot, management consultant, dealt with the sessions on appraising and interviewing.

Six further conferences will take place this year and early in 1956.

Esso Conference Delegates confer at Abingdon.

HOUSE MAGAZINE DIGEST . . .

Other Firms' News And Views

Not So Large

The large unit is in fact a feature of the chemical industry throughout the world. For many operations and plants there is a certain minimum scale below which it is not economic to go, while substantial economies can be secured by administering related processes as one unit.

From the foregoing certain broad deductions can be made.

First, *I.C.I.* is by no means the largest industrial unit in the United Kingdom; some of the nationalised industries are larger on the basis of number of employees. Second, *I.C.I.* is one of the largest companies in the country when measured by turnover, income and assets, and is probably the largest private employer. Finally—and this may well be the most important result of this brief analysis—in its scale of operations *I.C.I.* is not outstandingly large compared with the principal companies of the world, whether chemical or other. **(I.C.I. Magazine.)**

Simpler Methods

Lipton's Work Simplification Programme is not only proving to be significant in its progress within the company, but is beginning to be recognised as an authoritative example of smooth functioning by other leading companies as well. . . . It is not a sporadic management drive to eliminate some of the forms, records, and reports in the company, but rather it is a continuing day-in, day-out effort by most of the administrative and clerical people of the company to improve their own operations and the paperwork systems which they help operate. **(Lipton News.)**

Encouraging the Youngsters

An interesting feature of current discussions on "Training Facilities" has been the interest shown in the recently held series of lecture/discussion groups for juvenile employees. These talks, covering a variety of subjects, have been held during working hours and have aimed at giving an "Introduction to Industry" to juvenile employees. They have been well received and a continuation of this type of course, by private lecturers, is receiving consideration by the management. **(The Firefly.)**

Training With Pay for the Young Office Girl

By PAUL BENNETT

IN recent years more and more firms with office staff problems have followed the lead set by other sections of industry and have adopted staff training schemes. The system operated by *The Marley Tile Co., Ltd.*, of Sevenoaks, Kent, is a model of its kind and has done much to promote increased efficiency and a greater stability in their clerical departments.

Their scheme is designed especially for girls who join the company on leaving school at the age of 15 or 16 and for girls who join at certain periods after they have left school, provided that they are still under 18.

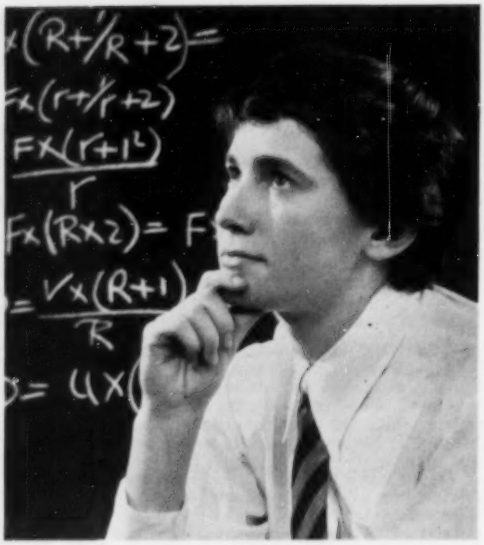
These girls receive full pay from the time their training begins. Initially, the entrants learn something, through talks and discussions, of the company's history and background, of their present-day organisation at home and overseas, and of their products.

Visits are paid to all of the various clerical departments, the girls spending several weeks in each to learn the details of office routine. At the end of the training course, which lasts about 48 weeks, the girls start work in one of the departments.

Entrants are expected to continue their education at a day continuation college or at evening classes. They are encouraged to take up shorthand, typing, and accounting machine operating, and are given time off to attend classes.

The progress of each entrant is reviewed every six months until she is 18. If progress is satisfactory her salary is increased at every review. After their 18th birthday, the girls' salaries are reviewed annually. On becoming 18 the girls are also admitted to a contributory staff pension fund.

The pictures shown here illustrate various stages through which a typical trainee passes, right from the time she is deciding her career until she takes her place as a trained employee in one of the company's departments.



1 When a girl reaches the end of her schooldays she has to decide which path to follow into a clerical career. There is the rather haphazard method of starting as an " office junior " and picking things up as she goes along. She could take a commercial training course at her own expense. Or she can become a trainee with a company that has an office-training scheme, and earn while she learns.

2 The discussion group plays an important part in The Marley Tile Company's training scheme. An experienced member of the staff explains the intricacies of certain procedures, and office trainees are encouraged to ask questions.

3 One of the first practical lessons that a trainee gets is on an adding machine. Here, the newcomer gets advice from an expert on how to use the machine in dealing with company figures.

4 Another department and another machine. As the trainee is moved around the Marley head offices she gets an insight into the work of all sections. When her training is completed she is better able to decide in which department she believes she will be happiest.

5 Typing correspondence also comes into the training curriculum. Here the trainee tries the technique of typing from a recording machine. She can attend shorthand and typing classes in working time—without loss of earnings.

6 Even the more advanced machines in this punched-card section are at the disposal of the trainee. Skilled operators teach the newcomers how to use this up-to-date equipment.

What AUTOMATION Means–2

How the Robot Factory Will Affect People's Jobs

By FRANK G. WOOLLARD,
M.B.E., M.I.Mech.E., M.I.Prod.E., M.I.I.A., M.S.A.E.

Automation will not come as an avalanche in this country, says the writer. Even so, there may be some displacement of workpeople and it will be a primary charge on management and the Government to redeploy them. Again, the highly complex automatic factory will be more vulnerable to strike action, so strikes must be avoided at all costs. Emotion must be avoided and the conference table replace direct action.

AUTOMATION, in my opinion, will not develop here so quickly as to cause an acute unemployment problem, but we must bear in mind that there may be some displacement of factory personnel which the automated factory may not be able to absorb. If this occurs it will be incumbent on employers, trades unions and the Government, through the employment exchanges, to co-operate in such a way as to make redeployment as easy as possible for those affected.

An aspect which I think managers should recognise is that men at work are involved with their workmates in a certain social pattern and with their place of employment. They may not be very conscious of this while they are at work, for it is a habit acquired over a considerable period of time. But when a man—after, maybe, many years—is suddenly thrust into new circumstances he may well feel that his world is crumbling. This, it is realised, does not apply to all men, but it applies in a far greater degree than is generally thought.

Let me illustrate. Winifred Raphael* tells how a woman operator of a somewhat ancient press cried bitterly when, one Monday morning, she found it replaced by a modern machine, saying "that press was like a child to me." We, as plant managers, can smile at that story; but to her it was no laughing matter. So, with these great changes about to become due, I would appeal for a sympathetic attitude to those liable to be affected by them.

Give Information

In my time I have been responsible for the installation of a great deal of automatic machinery and of flow-line layouts. Yet, thanks to reasonable consideration, adequate information and careful timing, friction with the workpeople was virtually unknown, and the changes were accepted without question and made without difficulty. The provision of adequate information regarding new plant or the rearrangement of existing machines is, in my opinion, an absolute essential for obtaining the full and willing co-operation of the works force; and it is easily achieved once the necessity is recognised.

I have advocated, for a flow-line rearrangement, that a model showing the alteration should be set up in the shop with a request that anyone who has ideas for improvements should put them in the suggestion box. This may not be fruitful of new or useful ideas, but it will have created confidence and, moreover, have prepared the way for the shifting of lockers containing the favourite cup, the looking-glass, the comfortable old shoes and other impedimenta which we all, in our several ways, are apt to collect.

The model is one aspect of the art of communication which we all recognise as a necessity but which we so often fail to implement. If I appear to over-stress this aspect I am unrepentant, because on the whole I think that technical men are better at handling machines than people. I believe it is plain horse-sense to see that our methods are acceptable to all concerned in our manufacturing establishments. It is part of the essential co-operation which is a requisite for the smooth working of an automated factory—and how can co-operation be expected where there is a lingering sense of injustice or a smothered resentment?

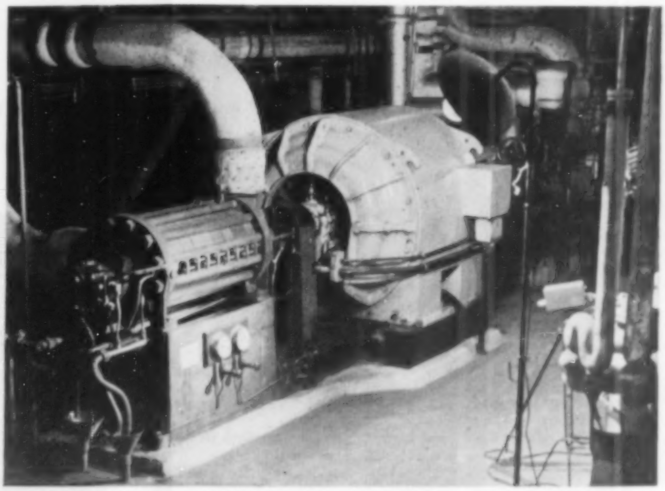
Automation will, in the long run, lead to shorter hours or higher wages or both. That this is inevitable is shown by the whole history of technological improvement, but it is to be hoped that management, on the one hand, will not be too tardy in meeting the situation; and that unions, on the other, will not press their claims too quickly, for—to adopt a favourite simile—the cake must be baked before it is cut, and the size of the slice is contingent on many factors.

One difficulty that may have to be met could arise from tensions set up by differences in the length of the working week and in the remuneration of employees in automatic factories and of those in trades that cannot take advantage of automation. There has, for some time, been a marked difference between the automobile workers in Birmingham and Coventry and those, for instance, in the engineering establishments of the North-East Coast, and automation may make this even more pronounced. Everyone in industry knows that our wages structure is built on shifting sands. Most of us are aware that the technique of job evaluation points the way to greater stability, but vested interests, timidity, the absence of goodwill and the lack of volition on the part of both employers and trades unions have prevented a solution of this problem. Automation may make it essential that these matters shall be reconsidered, and I am not so sure that, despite the many difficulties, this may not be good for all concerned.

---

* National Institute of Industrial Psychology.

Strikes (and I include lockouts) are acts of war. It will be realised that the highly complex automatic factory will be more vulnerable to strike action than the older types of workshops. Unauthorised strikes in one department, even in a small section of a department, could shut down the whole automatic factory. Strikes must, therefore, be avoided; responsibility must take the place of emotion; the conference table must replace direct action. Employers who may be tempted to think of automation as a weapon against their workpeople (I cannot think there are many such reactionaries) and workpeople who withdraw their labour without exhausting every channel for conciliation, will both be regarded as enemies of the people in this coming automatic age.



Ubiquitous TV will of course figure in the automatic factory. Here is a preview of things to come. For demonstration purposes a **Marconi** television camera is mounted for observation of a furnace feed-pump.

Automation will not, in this country, come as an avalanche but by easy stages proceeding from the automobile industry and gradually extending to other mass production industries. The reason that it will come relatively slowly arises from the fact that there are neither the machine tool manufacturers to build the machines nor the specialist engineers, mechanics and technicians to man the factories. The machine tool companies making this special equipment in Britain are all too few, but the credit for blazing the trail must be given to *James Archdale & Co., Ltd.*, who built the first automatic transfer machine for the Engines Branch of *Morris Motors Ltd.*, in 1923-24 and who are still the leaders in this field. To equip their works with automatic transfer machines the *Austin Motor Company* have had to establish shops to build the machine heads for which *Archdale's* supplied bases and transfer mechanism. *Austin Motors* have also found it necessary to set up a department to produce electronic devices.

There is, as far as I know, only one concern in this country specialising in inter-operation transfer devices, although there are several who make individual pneumatic, hydraulic, electric and electronic components.

There is also a dearth of young engineers who can either design or take charge of automatic plants, and an educational campaign is necessary to fill this need. It would seem that what is required is a series of short courses in mechanics and electronics for the shop-floor employees and a more exhaustive course for engineers and technicians. The latter will be drawn from men who have gained Higher National Certificate, and the course will probably be full-time for twelve months. It is a moot point whether these men should be drawn from the ranks of mechanical engineers and taught electronics or from electrical engineers and taught mechanical subjects, but in either case they must be steeped in the art of production engineering.

The trouble with the electrical engineer is his lack of appreciation of good mechanical practice. There is no doubt that the use of electronic apparatus on automatic transfer machines has been delayed because those responsible for the design of electronic devices did not appreciate the necessity for unit construction. The "package unit" is the succinct description given by our American friends to the plug-in component which, if it fails, can be replaced immediately while the faulty one is examined under proper conditions and at leisure. The mechanical engineer, on the other hand, has failed to appreciate the wide scope that is within the field of the electronic technicians. This is, of course, a general and not a particular criticism, and it is not mine but the opinion of those who suffer from the lack of advanced technicians.

(To be concluded.)

5 'Peace' Points for the Future

1. **Management should bear in mind that workers' loyalty to the group will remain.**
2. **New production methods should be "sold" to all departments of the factory.**
3. **Existing wage structures will have to be reviewed and overhauled.**
4. **Strikes must be avoided by making all possible use of conciliation systems.**
5. **There should be a series of short technical courses for men on the shop floor.**

This Firm Gives Chargehands A Year's Training

By ANDREW STEVENS

Here is an account of an unusual training scheme under which potential foremen are taken off their normal jobs and given twelve months' instruction in all aspects of their firm's activities. During this time trainees are encouraged to appraise and criticise the methods employed in the works. It is the firm's policy that any foreman should have a grasp of how the factory operates as a whole.

A trainee foreman studies a grinding operation in the toolroom.

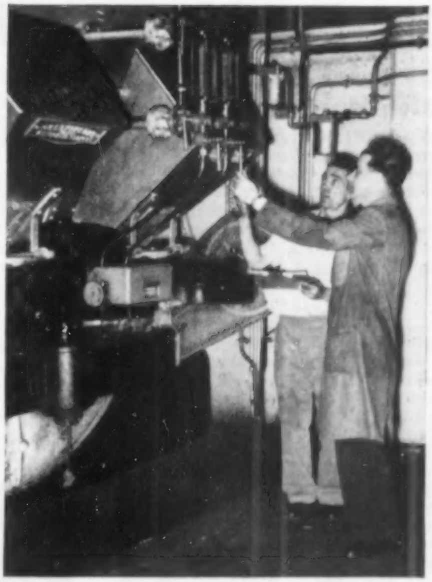
WHEN a firm working overtime to cope with orders is prepared to take a number of its best chargehands off their normal productive work in order that they may be groomed for foremen's posts, it becomes a self-evident proposition that the top management attaches top priority to this type of training. And one company now taking this very step is *Woods of Colchester Ltd.*, electric fan manufacturers, where this Autumn the first two chargehands to take this "Potential Foremen's Course," as it is called, will have completed their training and another two will begin theirs.

Foremanship activities have long been a prominent feature at *Woods*. At present, out of a workforce of 1,000 men and women, there are 23 foremen all of whom are members of the company's Foremen's Association. In one form or another this Association goes back 18 years but was reconstituted on its present basis some three years ago with the managing director as its president and two other top executives as vice-presidents. The chairman and committee, however, are drawn from the foremen themselves.

The purpose of the Association is to bring foremen together to talk over their common problems, discuss methods and make recommendations and so far their meetings have been 100 per cent. attended. Lectures are given from time to time by visiting speakers or company executives and visits made to other firms and to engineering exhibitions. A *Foreman's Handbook* is issued to each foreman as a guide to company procedure, responsibilities of the job, works rules, welfare matters and the Factories Act.

It is a main plank in *Woods* policy that the modern foreman's responsibilities are increasing, hence his authority should likewise increase and he should be expected to show initiative as well. It is for this reason that the company has ntroduced their course for training foremen of the future, the object being to prepare selected chargehands for foremen's posts *as these occur*. The scheme does not guarantee that the chargehands will be promoted upon completion of their training but this has in no way dampened enthusiasm for the course. How, then, is the training planned ?

The Foreman's Association meets for informal discussion. Meetings to date have been 100 per cent attended.



Examining boiler controls. During the first four months members of the course make a circuit of the various departments.

Two chargehands at a time are chosen and for the first four months they make a circuit of all production departments. During this time each chargehand is relieved of all routine duties and given full freedom to make his own appraisal of the methods employed in the works. At each move during his circuit he is required to make a report on what he has studied and is encouraged to make suggestions. For the first few reports he is left to express himself spontaneously which gives him the chance to show what ability he has in putting over his own point of view. Later he is given training in report writing.

The company feel that it is of the utmost importance that any foreman should have a clear idea of how the factory operates as a whole, so for the chargehand/trainee there follows after the circuit what is known as "Recapitulation of Factory Department Circuit." During this time the potential foreman comes under the wing of the general foreman.

Following this, the trainee spends a month in the Production Engineering Department and the Works Office where he has instruction in production planning.

The seventh month is known as "Half-way House" during which comes training in the human side of industry and personnel work. Training is given by a member of the management who, *inter alia*, lays stress on the need for supervisors to take a sympathetic interest in workers' lives as a whole without of course interfering in their private affairs. About ten per cent. of the entire course is devoted to personnel relations.

POTENTIAL FOREMEN'S COURSE

Month	
1. 2. 3. 4.	*Circuit of Factory Departments.*
5.	*Recapitulation of Factory Department circuit.*
6.	*Works Office. Production Engineering Department.*
7.	*"Half-way House".*
8.	*Outside visits.*
9.	*Apprentice Training School. Personnel Department. Report on Visits.*
10.	*"Stand-in" Factory Department to release established Foremen for training course.*
11.	*Residential Course (Burton Manor, Ashridge, etc.).*
12.	*Main Office organisation. Preparation and issue of final report.*

Next come the visits to other factories which is one of the most popular of features—with established foremen as well as with chargehand/trainees. It is on this part of the course that the best reports have been written. In the ninth month come spells in the Apprentice Training School and the Personnel Department, followed in the tenth by taking over as a foreman "stand-in" in the Factory Department so that established foremen can be released for their own training courses.

In the eleventh month arrangements are made for trainees to attend outside residential courses—such as at Burton Manor, Ashridge and the like—so that they can receive instruction and talk matters over with foremen from other firms at the same time. Finally, in the last month of the course, trainees study the main office organisation and prepare and write their final reports.

The ultimate purpose of the Potential Foremen's Course is to build up a reservoir of trained personnel, but *Woods* point out that it enables the better type of operative to see prospects beyond the next step in the ladder; and it also means that a man can be promoted after many years in the same job when normally he might have given up hope. During training, moreover, a chargehand loses nothing financially, his incentive bonus being paid as usual. The company, on the other hand, hope that the course will result in greater efficiency among all levels of supervision. So far they can definitely report there is every indication that this will in fact come about.

"Broader Aspects of Foremanship"

THIS is the title of the twenty-ninth week-end conference for foremen and forewomen which the Industrial Welfare Society is running at Llandudno from October 7 to 10 and application should be made to Mrs. O. K. Skelley, Administrative Officer, I.W.S., Robert Hyde House, 48, Bryanston Square, London, W.1, for particulars and accommodation. The Society has prepared an attractive programme and subjects for discussion include: "*The Foreman's Responsibilities Today*" (Sir Geoffrey Mander); "*Some Thoughts on Effective Speaking*" (Mr. Brian Power); "*What Can We Do About Personal Problems?*" (Mr. John Stamps); and "*Ethics of Foremanship*" (Mr. W. H. Bower).

The Society has also planned a number of other courses for supervisors of both sexes in London (daily and evening) and in the Provinces. There are also Foremen's Lunches in October and November.

People At Work

Health Insurance Report

CONFLICTING opinions are expressed in the report of a committee which enquired into the present provisions of the National Insurance (Industrial Injuries) Act under which benefit is paid for diseases and for personal injuries not caused by accident.

After two years' deliberations, the majority of nine, led by the chairman, Mr. F. W. Beney, Q.C., suggests that it would not be practicable to extend insurance cover to everyone who could show he was suffering from a disease, probably of occupational origin. But three trade unionists, Sir William Lawther, Sir Alfred Roberts, and Mr. C. R. Dale, in a minority report, reject the majority's conclusions except for one urging "the assiduous pursuit of research into occupational health hazards".

The minority state: "We consider that the minor proposals in the majority report fall far short of the major changes needed if prescription is to be enabled to work effectively." There are now 39 diseases prescribed under the Act against which more than 20 million working people are insured for cash benefits.

Although they agree that this would be the proper course if practicable, the majority refuse to recommend the extension of the scheme to cover all cases where a claimant can show that his disease is probably of occupational origin.

The difficulty which the majority consider to be insuperable is to devise any means of identifying clear-cut cases without, at the same time, opening the door to many claims which could not be determined on a satisfactory basis.

But the minority, rejecting this, claim that incidence rather than attribution would become increasingly important as a means of establishing the relationship between disease and occupation. Small-scale investigations, they state, have already confirmed submissions that an excessive incidence of substantial disablement from bronchitis and rheumatism existed in occupations such as mining.

As an alternative test to meet the difficulties envisaged, the minority consider that the basis should be a balance of probability. A disease should be prescribable if it could be presumed with reasonable certainty that most of the cases in the field covered were occupational.

The committee are agreed that the assiduous pursuit of research into occupational health hazards is essential to the effective working of the scheme of prescription, and they emphasise the importance of using statistical techniques for this purpose. They recommend that the Industrial Injuries Advisory Council be made responsible for keeping under constant review the schedule of prescribed diseases, and for suggesting to the Minister diseases which might be prescribed and research or investigations bearing on prescription which might usefully be carried out.

The committee also recommend that to enable the Council to discharge these responsibilities effectively, a small body of highly-qualified specialist staff should be put at their disposal.

Is This A Record?

THESE two London girls type almost as fast as most secretaries can write shorthand. They were British representatives in an international typing team which the *Olympia Typewriter Company* sent to Monaco for the world typing championships, in August.

Nearest the camera is auburn-haired Barbara Stack, aged 23, who is a clerical officer for the Metropolitan Police at their Paddington headquarters.

Next to her is Margaret Mitchell, 28-year-old brunette who is a secretary with a City firm of machinery exporters. Margaret lives at Trossachs Road, East Dulwich. She started typing when she was 14, but a serious illness when she was 20 kept her inactive for five years. To regain her present typing speed she had to undergo an intensive refresher course.

These two girls, together with another Londoner, Vicky Lyons, were the first three U.K. entrants in the championships. Their typing speeds are over 100 words a minute.

Personnel Ratios

A SURVEY of personnel ratios and salaries conducted in the U.S. this year disclosed that the number of people employed in personnel work in proportion to total company employees has attained a new record.

The average personnel ratio—number of staff members in personnel and labour relations per hundred employees—hit a record high of 0.87 in January and February this year. This is an increase of more than a third over last year's 0.65.

Also at its highest level since the annual survey was begun eight years ago is the average annual salary of the executive in charge of company employee relations—$10,530, a 6 per cent increase over last year's $9,932.

On the basis of the survey replies, the journal "Personnel" draws the following composite picture of the individual in charge of employee relations:—

"He is a man with the title of personnel director, but doing a job that includes both 'personnel' and 'labour relations'. He is approximately 43 years old, with 12.3 years of experience in the field, and 6.4 years in his present job. He is a college graduate. He regularly reads four professional periodicals and is a member of two or three professional associations."

Wage Increase

FROM September 1, about 200,000 clothing workers—75 per cent of them women—received wage increases as the result of an agreement between the Wholesale Clothing Manufacturers' Federation of Great Britain and the National Union of Tailors and Garment Workers.

A general increase of 2d. an hour for men and 1½d. an hour for women, with corresponding increases for juveniles, is being paid to workers in the wholesale tailoring, mantle, and costume industry.

It has also been agreed to send applications to certain wage councils, where the legal minimum rates fixed are substantially below the average earnings for the industry, for increases of 2½d. an hour for men and 2d. an hour for women, with corresponding rises for juveniles.

Lunch Voucher 'Racket'

AN attack on the luncheon voucher system is contained in an article published with the 1954-55 report of *Pye Ltd.* Because of the system, it maintains, the taxpayer is "subsidising city businesses on an ever-increasing scale."

The article says that the salaried employee who would not relish eating sausage and mash in an office canteen is willing to accept a voucher to pay for sausage and mash in a restaurant of his own choosing. Money received in the form of a voucher is not taxed like money received as a salary increase.

"Clearly the primary gainers from the system are the restaurants within the scheme", it says. "Another group which undoubtedly gains from the vouchers are the firms with large offices. At a time when they know that they will have to offer facilities for some sort of a midday meal if they are to keep their staff, they are relieved of all the difficult incidentals of doing so themselves and are paid a considerable rebate from public funds for doing so.

"An industrialist who runs a canteen

in his works can charge to his working expenses only the losses he incurs, but by some peculiar manipulation of logic known only to business accountants of the Inspector of Taxes, firms which cannot be bothered to provide such facilities are allowed to charge the entire cost of their employees' meals against business expenses."

Skin Research

STATISTICS show that a formidable amount of time is lost to production in industry through employee absence arising from skin diseases contracted in the course of work. The magnitude of the problem from the production point of view is matched only by the importance to the individual and his health and safety.

In this connection, therefore, it is encouraging to note that research is now well advanced at the Birmingham Accident Hospital—which has a notably close liaison with local factories—into the nature and prevention, as well as the cure of such diseases. The work is being carried on under the direction of Professor J. R. Squire, who estimates that industry loses £1,500,000 a year on time lost through skin diseases and that about £500,000 more goes on benefits.

He and his research team believe that the experiments now going on at Birmingham may save the country about £2,000,000 a year. One major discovery which has already been made is that skin can live outside the body—in a test tube—ready for use with burns and cuts. From the welfare angle, the project is of profound significance and its ultimate findings will be awaited with interest.

Training for Radio

A NEW booklet published by the Central Youth Employment Executive, called "Radio and Television Servicing" describes the training, qualities required, opportunities of employment and avenues of promotion which are open to youngsters who make a career in this occupation.

Intended primarily for boys who are about to decide what to do on leaving school, the booklet explains that service engineers are required in shops which sell and repair receivers, in organisations which repair them for the shops, by the manufacturers of receivers and other radio and electronic equipment, and by the organisations which relay radio and television by wire into homes and places of work. Details of opportunities in airline companies and the Government service are also described.

Separate sections are devoted to basic training, training in systematic testing, apprenticeship, technical studies, and wages and working conditions.

Copies of this booklet, No. 66 in Choice of Careers new series, are obtainable, price 1s. 6d., from H.M. Stationery Office or through a bookseller.

Promotion

MR. WILLIAM HOLYOAK, who began work at Fort Dunlop 26 years ago on the shop floor as a tyre builder, has been appointed production manager at the factory. Born at Aston, Birmingham, in 1911, Mr. Holyoak was selected as an instructor to help in opening up the Dunlop factory at Durban, South Africa, in 1934. He returned to England after 18 months, but within four months was sent to India on a similar mission.

Following his return to England in 1937, Mr. Holyoak held a variety of executive posts until May, 1954, when he became departmental manager of the motor cover department. Shortly afterwards he visited America for the company. He succeeds the late Mr. T. S. Gardner in his latest post.

TV Sports Commentator

TONY VAN DEN BERGH, 39-year-old personnel manager of a famous tobacco firm, gave the first sports commentary on independent television.

A former amateur light heavy-weight, he was chosen by the Associated Broadcasting Company to tell viewers about boxing at Shoreditch Town Hall on September 22—the first day of commercial television in this country.

It was by no means Van den Bergh's first appearance before either microphones or cameras—he is a member of "The Name's The Same" panel, and has done some boxing commentaries for the B.B.C. television service. He has also written several features on boxing for the B.B.C. and is to deputise for Richard Dimbleby in three broadcasts of "Twenty Questions."

Married, with a nine-year-old daughter, he lives at Egham, Surrey. Radio is not his only spare time job—he is a poet and a former editor of the magazine "Poetry Review."

Rehousing Effects

THE increased time and cost of getting to work is a substantial factor in altering both work and leisure habits, according to Dr. H. G. Maule, lecturer in applied psychology, London School of Hygiene. Average journeys take 30 minutes and cost 8d. daily.

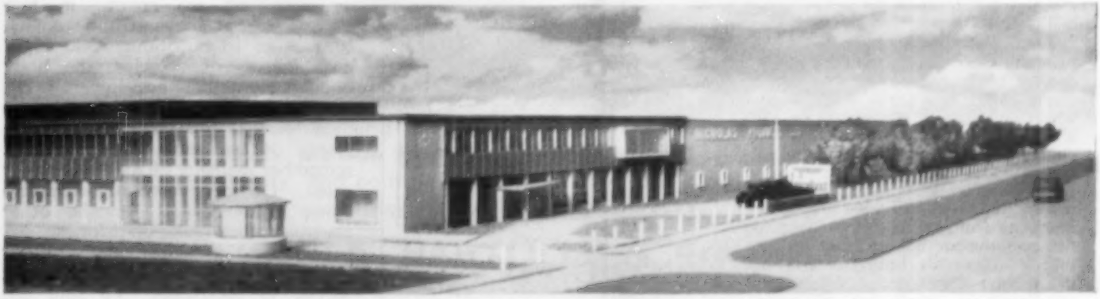
Dr. Maule, speaking to the psychology section on social and psychological aspects of rehousing at the meeting of the British Association last month, said that where housing and industrial planning were divorced, such consequences might be expected. From a study of 88 families who were moved from a metropolitan area to a new housing estate it was found that within the first year a quarter of the employed men changed their jobs.

IN BRIEF

The number of persons registered as unemployed on July 11 was the lowest recorded since the war, viz., 185,000, including 19,000 who were temporarily stopped. The proportion of the estimated total number of employees who were unemployed was 0.9 per cent, compared with 1.0 per cent in June and a year ago. The number unemployed more than eight weeks was 78,000, which was 47 per cent of the wholly unemployed.

* * *

The index number of industrial production (1948 = 100) prepared by the Central Statistical Office is estimated provisionally at 136 for June, 1955 (the early estimate was 137-138) compared with a revised figure of 138 for May, 1955. Figures for the corresponding months a year ago were 128 for June, 1954, and 133 for May, 1954.



This is the architect's impression of a 285,000 sq. ft. factory to be erected at Slough for the Aspro Group of Companies. An unusual feature of the design is that natural lighting will be excluded altogether from the factory—in order to ensure an even lighting intensity. The artificial lighting plan will be in excess of normal standard requirements. The factory is estimated to cost £1,000,000.

One of the functions of a canteen, says the writer, can be to make customers more aware of nutritive values. The firm, moreover, has special responsibilities in the case of young employees and heavy workers. Good nutrition is not, however, a matter of food alone: it depends also on good digestion, and that means a pleasant atmosphere and efficient service.

Use Your Canteen To Boost Better Diets

By M. F. FINCHAM,

Canteens Department, Industrial Welfare Society.

AT the present time overweight is said to be the most common form of malnutrition in this country and across the Atlantic. Since the early 1920's when the boyish look came in, the female of the species has given much attention to the figure. The recently introduced A and Tube Lines have given fresh impetus to the slimming craze as evidenced by the spate of diets on women's pages in the Press and in magazines. Although probably not properly understood, the word "calorie" is about as much in conversational use as "productivity".

We are quick to make use of other discoveries, why not those on nutrition now everyone earns a reasonable wage, so removing the chief cause of poor nutrition — poverty. The potentialities of better health through better eating are available to almost everyone in this country.

For the normal person who wishes to maintain a steady weight or to reduce a bit, this is the most important fact: *if too much energy food is eaten for the amount of energy expended, the excess will be laid down as body fat*:

The industrial and staff canteen can exert an influence on the dietary habits of its customers and I believe one of its functions could be to impart a better realisation of nutritive values. In the field of feeding people at work there are special responsibilities on the caterer towards the younger employee and to the more heavy workers. Again many canteen customers are slimming addicts and helping over diet is one way of spreading knowledge of what really constitutes healthful nutrition.

Many canteens now feature a health lunch. Here is an example:

> Fresh roast beef, a mixed vegetable plate (four vegetables including potatoes dressed hot), poached plums with ice-cream or junket, milk to drink, wholewheat roll, butter and cheese as well if required; and slimming lunches . . . comprising plainly cooked protein content (meat, fish, egg, cheese), a large serving of a variety of green salads, tomatoes, cucumber and so on, including fruits, shredded cabbage for the adventurous but no potatoes and only a little carrot, beetroot. Dressing of a non-oily type. Wholewheat crispbread, a small pat of butter. Orange, apple or other fruit. Tea, black coffee, without sugar, or fresh fruit juice only lightly sweetened.

There has been a tendency in some circles to despise the snack meal. Whether or not a snack is good or bad food value depends on its make-up, and so does the "cooked" dinner. It is not a matter of the one having more virtue than the other. A well-chosen snack, that is, one composed of the essential nutrients in adequate proportions, may well suit many people better than the orthodox lunch. Unfortunately the meal carried from home tends too easily to be of mere "bread and spread" kind. There is no doubt that the mid-morning and afternoon refreshment, particularly the former, do help to keep us going and really refresh. These snacks, too, are best if not of the starchy, sugary sort plus tea. One tenet now held is that smaller meals, taken more often, are better digested and assimilated.

The heavier workers sometimes prefer a snack because it gives them energy in a convenient form. Fat content is always high in the heavy worker's diet and is necessary if the diet is to be palatable, apart from other reasons. Something not always realised is that to make best use of energy foods, to burn them up in the body, one of the B vitamins is of great importance. Anyone who is interested in weight control should be particularly careful to have an abundant supply. Good sources of Vitamin B, are yeast, yeast extract, cereal germ, lean meat, bacon, pulses.

THE 7 BASIC FOOD GROUPS

1. *Leafy, green and yellow vegetables.*
2. *Citrus fruit, tomatoes and raw cabbage.*
3. *Potatoes, other vegetables and fruit.*
4. *Milk, cheese, ice cream.*
5. *Meat, poultry, fish, eggs.*
6. *Bread, flour, cereals.*
7. *Butter and margarine.*

Something from each group should be eaten daily.

What is eaten is not all in this matter of nutrition ; good nutrition means good digestion and that means good catering and pleasant service. There is a psychological aspect too. Long-standing habits cannot be changed overnight. One can't expect someone, say, who has fed on fried fish and chips for years to take kindly to salad dinners. Diet changes must be achieved gradually. All food eaten whether in orthodox meals, the odd chocolate, toffee, drink alcoholic or otherwise, ice cream, in fact everything that goes into the stomach contributes to nutrition. One could give sources of proteins, the body builders ; vitamins and minerals, the body regulators ; and discourse upon their various functions. There are plenty of lists and literature. But remember *amounts* of foods normally eaten. Do not concentrate on calories alone. Choose first for the other essentials, then make up calories.

Catering includes the proper selection, preparation, cooking and service of foodstuffs. To sum up: the better the catering, the better the chances of having all the necessary nutrients.

Bartlett

EQUIPMENT FOR TEA & COFFEE SERVICE

at the

B.B.C.

Lime

Grove

Studios.

Bulk Water Boiler with Multipots; Storage Units for Coffee and Milk, and a specially designed Trolley provide beverage service quickly, efficiently, and continuously.

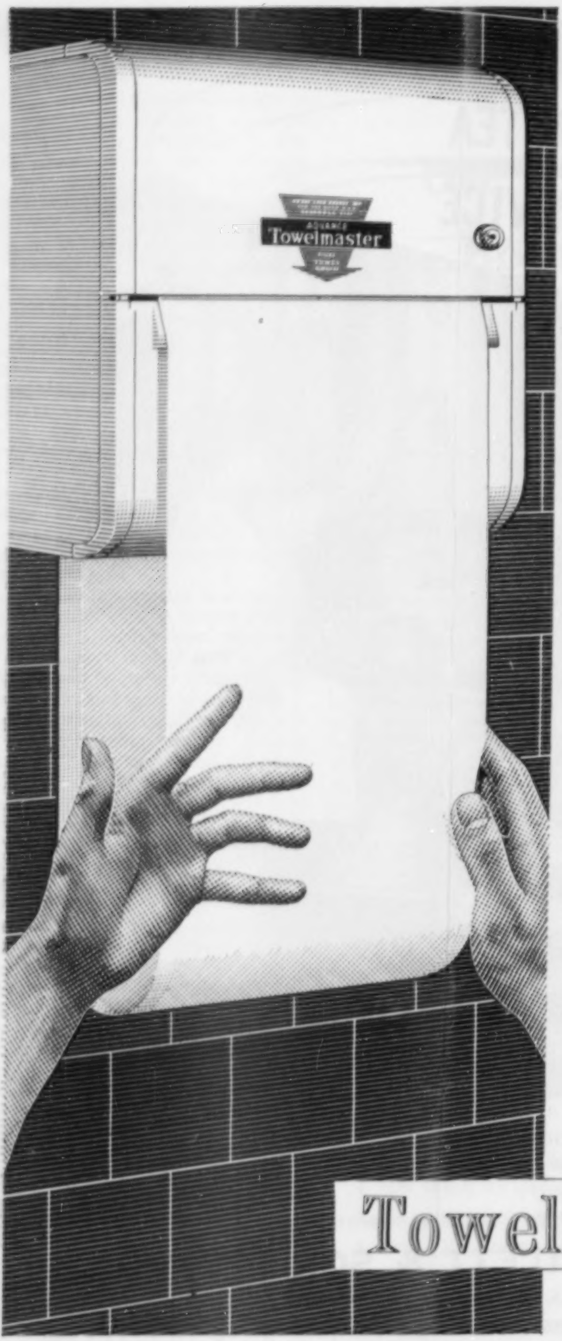
Please write for our latest literature.

G. F. E. BARTLETT & SON LTD.

BELL STREET, LONDON, N.W.1. ENGLAND Telephone PADDINGTON 8222

S.B. 67

BIRMINGHAM: 12, Whitmore Road. Tel. Victoria 1615 MANCHESTER: 530, Stretford Road. Tel. Trafford Park 0288



Clean dry healthy hands – three pairs a penny

Have you seen the Towelmaster – the gleaming white cabinet that, for 5/-, gives 180 pairs of hands an honest-to-goodness dry on individual spaces of laundry-fresh towel?

Nothing could be more efficient. Yet the cost is small and can be accurately estimated for the year ahead.

There is no capital outlay. A minimum of two cabinets is installed and maintained free of charge. All you pay is 5/- for each roll of towelling used – minimum usage is only one roll per cabinet per week. Moreover, the Towelmaster represents an indirect saving of labour, as it eliminates time spent collecting and distributing individual towels.

Towelmaster cabinets add prestige to every office and factory; the efficiency of their operation increases goodwill amongst staff and visitors alike. For a small investment, it pays rich dividends – not the least of which is a clean bill of health.

We'll be glad to discuss your particular needs – without obligation.

ADVANCE

Towelmaster

Advance Linen Services Ltd (Dept. T20)
Stratton House, Piccadilly, London W1
Telephone: Mayfair 8886

New Industrial Equipment

EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

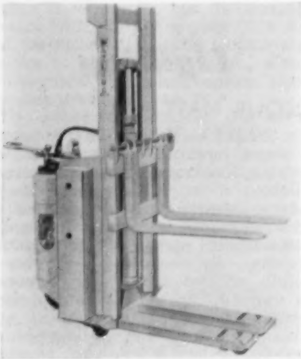
Readers who wish to know the suppliers of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph. We are always glad to consider for publication descriptions — preferably accompanied by an illustration suitable for reproduction — of new products.

Efficiency Aids

BETTER STACKING

THIS pallet stacker has been designed to operate in confined spaces, and owing to the small size of its power unit it can be manoeuvred in very narrow gangways.

Within a specially treated fabricated steel tank are mounted a control valve, a pressure relief valve, and a gear type pump which feeds through flexible pressure tubing to operate the lifting jack.



Driving control is by means of a tiller which is integral with the power unit. The machine is set moving by depressing the tiller after pre-selecting the speed. Releasing the tiller automatically applies internal expanding brake shoes.

The capacity of the stackers ranges from 1,000 lb. to 3,000 lb., and the maximum lifts range from 54 inches to 90 inches. Ride-on power units can be supplied, and an extensive range of ancillary equipment is available.

TWIST WITH SPEED

AN American hand tool which twists wire speedily and efficiently is now available in this country. It was designed for use where wire twisting is normally done by hand or with pliers.

The jaws of the tool grip the wire, which is locked within them by sliding down the knurled sleeve in the centre while squeezing the handles together. By pulling on the central spindle, the tool spins and twists the wire to any desired degree. The jaws are then opened simply by slight pressure on the handles, and the ends of the wire are cut off with the side cutters incorporated in the plier head.

The tool, which is supplied in three sizes, 9 in., 10 in. and 12 in., is recommended for use in the aviation industry, where many connections are wired up to prevent their becoming loose through vibration, and also for bag-tying, bundling and coiling. **(PM/1007.)**

TYRE CHANGER

THIS *Octopus* hydraulic tyre-changing equipment has been designed to separate, remove, and assist in refitting commercial and earth mover tyres which have become frozen on to wheel rims.

The power unit is a separately fitted hydraulic pump capable of exerting a pressure equal to 20 tons which is transferred to the tyre bead via the octopus self-centering framework and separating wedges. The equipment also incorporates a lifting winch attached to a rotating jib for the easy handling and positioning of the separating unit over the hydraulic table, and for placing heavy and large tyres and wheels on to the hydraulic platform.

The wedges are actuated by a spider framework which is adjustable by a handwheel to alter the position of the wedges as required for different rim sizes. The assembly is also easily adjustable vertically on the centre screwed shaft to permit different tyre sizes and rim depths to be accommodated. **(PM/1008.)**

SPHERICAL PIN GAUGES

A NEW technique involving spherical pin gauges has been developed to control the quality of mass-produced bores. These gauges obviate the necessity of plug and plate gauges for bores from 1½ in. to 42 in. diameters.

They consist of a steel rod, the length of which is decided by the required diameter, both ends being domed to fit precisely against the surface of the bore. By moving the gauge horizontally around in the bore any ovality can be detected. **(PM/1009.)**

TUBING FOR CORROSIVES

A NEW type of tubing has been developed for conveying corrosive liquids via pipe line. In the development of *Metica* tubing, the manufacturers have attempted to overcome a major difficulty in the conveyance of corrosive chemicals. Although carbon is theoretically the best medium for this work, because of its complete resistance to almost all such chemicals, even in the hot state, it is comparatively fragile when in the form of tubes.

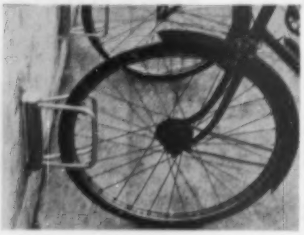
The new tubing is, in fact, two tubes. An inner tube of carbon or graphite is protected by an outer tube of metal—a combination giving both resistance and high mechanical strength. This tubing is now commercially available together with special fittings that ensure continuity of carbon in the pipes.

Metica tubing can be supplied in standard six-foot lengths of diameters varying from 1¼ in. (⅞ in. inside) to 5 in. (4 in. inside). **(PM/1010.)**

Welfare

BICYCLE PARKING

A SIMPLE but secure method of parking bicycles is provided by the *Velopa*. The method of parking is quite effortless; the bicycle is merely pushed forward until the front tyre engages with the serrated arms of the holder. For extra safety, the cyclist can secure his machine by means of an ordinary padlock and chain.



The holders are made from robust steel tubing and a bar. They are heavily galvanised after manufacture and are highly weather resistant. They may be fixed by bolting, screwing, or grouting to any kind of wall or post, and are frequently used in conjunction with metal handrails of all types.

A number of models are available. A swivel type is supplied for wall or railing attachment, or, where parking space is limited, the arms can be made to branch from the fixture at an angle. There is a variety of methods of fixing.

The same firm also supplies complete covered stands for specific sites together with roofing materials to customer's requirements. **(PM/1011.)**

Building

SPEED AND STRENGTH

PREFABRICATION as a building technique has made rapid strides since the war, particularly in its application to factory and industrial buildings. One system by which light, strong structures can be rapidly erected utilises tubular steel.

One of the main advantages of this system, claim the contractors, apart from its competitive price, is the speed and ease with which it is possible to put up a building, using a labour force of only three or four men in some cases.

The use of steel tubes in the manufacture of the building components enables weight to be reduced without loss of strength. The contractors estimate that construction by the traditional sections is approximately 45-50 per cent. heavier than by tube. **(PM/1012.)**

Handling

POLES AND PERCHES

A NEW overhead line pole for use on distribution and transmission lines where supports do not have to withstand heavy mechanical loading has recently come on the market. In its design, much attention has been given to the need for economy, lightness, and simplicity of construction.

These features have been achieved by fabricating the pole from standard commercial sizes of small-bore steel tubing and by adopting a bracing system which permits a break down of the complete pole into component pieces.

The pole is made in two sizes, 30 ft. and 35 ft. overall length, intended for a depth below ground level of 5 ft. and 5 ft. 6 in. respectively. It has been designed for an ultimate load not exceeding 1,250 lb. at the pole top, and has been subjected to full-scale comprehensive tests so that the poles are of a guaranteed known strength. **(PM/1013.)**

BIN MOBILITY

THIS new "Bin Boy" bogie is for easing the movement of bins, tubs and the like up to 18 in. in diameter.

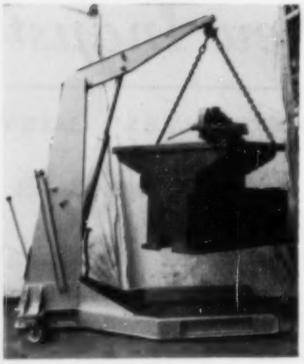
Its overall dimensions are 21 in. diameter and 5 in. high, and it has a capacity of 1½ cwt. On four swivel castors with all-rubber wheels, the makers say that it lends extreme mobility to loads. **(PM/1014.)**

LIFTING MADE EASY

THE *Maxilift* hydraulic crane has been designed to cover a wide application of lifting jobs likely to be met in factories or garages. The minimum effort needed to lift a load of one ton is obtained by a hydraulic pump operating a ram connected to the jib.

The overall height with jib lowered is 6 ft. 4½ in., allowing the crane to be moved through low doorways. However, the equipment will lift to a maximum height of 9 ft. 4 in. It is fitted with castor wheels, enabling it to be moved easily. The provision of well-splayed legs eliminates any tendency to tip.

The jib extends from a minimum overhang in the horizontal position of 3 ft. 5 in. to a maximum of 4 ft. 7½ in. The safe working load of one ton applies when the jib is closed; when the jib is extended, the capacity is restricted to 15 cwts.



The crane is made in either manual or motorised models. **(PM/1015.)**

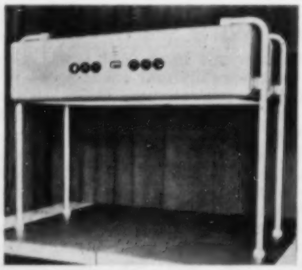
Lighting

COLOUR MATCHING

A NEWLY-DEVELOPED lighting unit, specially designed for the matching of colours, has recently become available.

Many industries have found that the colour constancy of natural daylight is insufficient to permit accurate colour-matching. By employing a number of carefully selected light sources, mounted in a single fitting, the new unit provides constant colour illumination of substantially the same spectral composition as natural daylight from a clear Northern sky at noon on a March day.

The fitting consists of a number of fluorescent lamps housed in a reflector casing of grey hammer-scale stove enamel. It can be mounted, by means of its four adjustable supports, over an inspection bench or, alternatively, can be suspended from the ceiling. Additional features are an automatic, lamp burning hours meter, and indicator lamps which show that the circuits are functioning correctly.



The unit is recommended for use with textiles, paper, dyeing, leather, paint and lacquer, and in the chemical industries. **(PM/1016.)**

Heating

CONSTANT TEMPERATURE

THIS is a fully-automatic coke-fired boiler installation which is now being produced by a British manufacturer. Suitable for heating factories, office blocks, and other large buildings, the boiler has automatic feed and de-ashing equipment, and will maintain absolutely constant temperatures. Under normal conditions, tests have shown that it operates at efficiencies in excess of 80 per cent.

Automatically-controlled conveyors feed coke as required from a storage bunker to an internal hopper of the boiler, and remove clinker and ash to storage outside the boiler house. The boiler has twin grates which are declinkered alternately by automatically time-controlled rams.

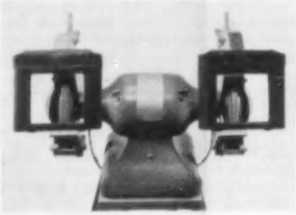
The heating surfaces of the boiler show a radical change in thought concerning the combustion of coke. The total heating surface is 93 sq. ft., but the surface in contact with the fire is only 5 to 6 ft., and the radiation heating surface above the fire is less than 15 sq. ft., whereas the secondary tubular heating surface amounts to nearly 73 sq. ft.

To ensure the efficient use of this secondary heating surface, patented spiral gas-flow retarders are fitted inside the tubes, and the combustion of gases just before entering the tubes is completed by the injection of a carefully controlled amount of secondary air pre-heated to 275°-300°F. The high turbulence imparted to the secondary air ensures not only intimate mixing of the gases, but also a uniform heat-absorption over the whole of the tube banks. **(PM/1017.)**

Safety

GRINDER GUARD

THIS illuminated interlocked grinder guard has been designed to provide a greater degree of protection. A switching arrangement incorporated in the screen casing is wired into the grinder motor, and immediately cuts out the supply to the motor when the guard is moved out of its protecting position in front of the grinding wheels.



The cut-out is effected by a mercury switch mounted in a totally enclosed position and can be set to cut the supply to the motor within one inch of vertical movement from its correct protecting position. The guard is also designed to provide light in the correct place and eliminate harmful reflections.

Lamps located in vertical tubes at the sides of the safety screen are arranged to throw light on to the front and sides of grinding wheels, enabling operators to see clearly the working area. **(PM/1018.)**

SKIN PROTECTION

A BARRIER cream containing hexachlorophene, an antiseptic used extensively in the United States, has recently been developed for use in industry by a British manufacturer. It is claimed that the product is bacteriostatic and bactericidal and keeps hands of workers in a sterile condition.

The cream is produced in a number of grades intended for use in work involving a variety of materials which are likely to cause dermatitis. **(PM/1019.)**

Cleaning

PIPE CLEARING

AN inexpensive method of dealing with blocked pipes in office buildings and factories is provided by the *Sani-Snake*, a length of solid flexible steel shafting. The *Sani-Snake* is fed into a blocked shaft through a feeding block which can be fixed speedily.

It is then driven by a hand mechanism down the pipe, through traps and round bends, until it reaches the obstruction. The obstruction can be caught up in the mechanism incorporated in the end of the shaft and withdrawn, it can be bored through, or it can be pushed by the equipment into a larger pipe to be washed away. **(PM/1020.)**

DAILY HERALD

The skilled man you need . . .

Out of a total DAILY HERALD readership of 6,786,000* there are nearly 4,000,000 skilled workers. In this vast pool of skilled labour, employers all over the country have found the replacements they were looking for. By advertising, as they did, in the classified columns of the 'Herald', you can have the same success.

Every classified advertisement appears in ALL copies, covering TOTAL circulation.

. . . reads the

DAILY HERALD

**Taken from the Survey carried out by the Institute of Practitioners in Advertising.*

Rate 20/- per line. Communications should be addressed to: Classified Advertisement Manager, DAILY HERALD, Acre House, Long Acre, London, W.C.2. Tel.: Temple Bar 1200 (Ext. 454 & 466).

CANTEEN ADVICE BUREAU

Do's And Don'ts For Good Coffee

We should be very grateful for any help which you can give us with regard to the supply of coffee for our 400 employees.

It was always our practice to use a certain brand of coffee essence but, in spite of repeated attempts, we find that we now simply cannot obtain supplies of this. We have, therefore, been using ground coffee which is made by using boiling water from a steam kettle. We are receiving constant complaints from the staff that the coffee is unsatisfactory and we have spent considerable time in an attempt to improve it, without success.

We wonder if you can advise us of the best method of making coffee from ground coffee and whether or not any special brand is recommended. (F.M.S., Chorley.)

COFFEE can be made either by the principle of "steeping" or by the principle of "filtration." The simplest method is that of "steeping" which consists of placing medium ground coffee in a heated jug and pouring over it a quantity of fresh boiling water. This is immediately well stirred and allowed to stand for six minutes, after which the brew is carefully strained into another heated storage container. Coffee made in this way should be drunk at once for it rapidly deteriorates if allowed to stand.

The "filtration" principle consists of pouring a measured quantity of fresh boiling water over a measured quantity of coffee which is lying in some kind of filtering medium. The brew will be made by allowing the water to filter through the grounds. The water should be allowed to remain in contact with the grounds only long enough to make a good brew; too long a contact results in a bitter flavour.

Points to Watch in Making Coffee

Buy a good quality blend of freshly roasted or packed coffee.

State your requirements to your supplier and thereby place the onus on him to supply a coffee best suited to your needs.

Use enough coffee (never less than 12 ozs. to 1 gallon of water.)

Do serve hot.

Keep the equipment clean and follow the maker's instructions.

Do not mix old and new coffee purchases in same container.

Do not make more than can be sold in one hour, and never save coffee to be re-heated and used later.

Heat the milk but do not boil.

Coffee should never boil.

Make one person responsible for coffee-making.

APPOINTMENTS

MR. KENNETH BAIRD, formerly training officer at *Rotax Ltd.*, aircraft electrical equipment manufacturers at Willesden, N.W.10, has been appointed education and training officer of the Industrial Welfare Society in succession to **MR. BRUCE STANNION.** Mr. Baird, who is 33, also spent four and a half years with *Kodak Ltd.*

MR. R. H. COLLCUTT has been appointed Head of the Operational Research Section of the British Iron and Steel Research Association, in succession to Mr. R. T. Eddison.

Before joining BISRA, Mr. Collcutt served for several years on headquarters staff of the Scientific Adviser's Department at the Air Ministry.

MR. R. T. EDDISON, who was appointed Head of BISRA's Operational Research Section in 1948, resigned in June last to organise the new Planning Department of N.A.A.F.I., of which he has been appointed Manager.

AVERAGE weekly earnings for the last pay-week in April, 1955, of 7 million manual wage-earners in the industries covered by the half-yearly M.o.L. enquiry amounted to 182s. 3d. This figure covered bonuses, overtime, etc., and was before the deductions for income tax and insurance contributions. It compared with 171s. 9d. for October, 1954, and 53s. 3d. for October, 1938.

THE BARRYWALD REGD.

Safety Automatic Incinerator

By the simple depression of a lever the **Barrywald Sanitary Incinerator** automatically destroys sanitary towels, surgical dressings, documents, etc.

It solves major and vital welfare and security problems in factories, offices, institutions, etc.

Write or phone today for illustrated leaflet or demonstration.

BECAUSE –

- ★ It is manufactured by the first and leading Sanitary Incinerator Specialists in the World.
- ★ It is guaranteed for one year and backed by a full service organization.
- ★ It is simple and cheap to install.
- ★ It is the only incinerator incorporating our patented safety devices.
- ★ It is approved by The Royal Institute of Public Health and Hygiene.
- ★ It is regularly supplied to and approved by all H.M. Government Departments, Local Administrations and Educational Authorities, Hospital Management Committees, General Industry.

ECONOMICAL · FOOLPROOF

EFFICIENT · INDISPENSABLE

Patents 555062—621095 and Foreign Patents

SANIGUARD APPLIANCES LIMITED

62, LONDON WALL, LONDON, E.C.2

Telephone: NATIONAL 8881 8882

DIVISION OF ALLIED METALS LTD.

Summary of Official Publications

READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

GENERAL

Choice of Careers, New Series No. 66. Radio and Television Servicing. Published by Ministry of Labour and National Service. *H.M.S.O.* 1s. 6d.

Dermatitis, Cautionary Notice. Broadsheet describing main causes and protective measures. Form 367. *H.M.S.O.* 3d.

Diseases—Provisions of the National Insurance (Industrial Injuries) Act. Report of a Departmental Committee appointed to review this matter. Cmd. 9548. Published by Ministry of Pensions and National Insurance. *H.M.S.O.* 1s. 3d.

Electrical Accidents and Their Causes, No. 929. Published by Ministry of Labour and National Service. *H.M.S.O.* 3s.

Factory Orders. Reprint of 1951 edition. Published by Ministry of Labour and National Service. *H.M.S.O.* 12s. 6d.

Labour Gazette. Vol. LXIII, No. 8, August, 1955. Published by Ministry of Labour and National Service. *H.M.S.O.* 1s. 6d.

Mines. H.M. Principal Electrical Inspector of Mines Report for 1952. Published by Ministry of Fuel and Power. *H.M.S.O.* 2s.

Staffs Employed in Government Departments. Statement showing the Civil Staffs employed in Government Departments on July 1, 1955. Cmd. 9558. *H.M.S.O.* 3d.

Wages Incentive Schemes. Published by Ministry of Labour and National Service. *H.M.S.O.* 1s. 6d. Gives details of various systems of payment by results.

INDUSTRIAL COURT AWARDS

No. 2576. Mastic Asphalt Industry. Potmen, Mixermen and Chargehands—Rates of Pay—Claim for Increase. Reference: That the increase of 2½d. per hour granted to Craftsmen on 18/4/55 should also apply to Potmen and Mixermen, and that there should be an additional increase of 2d. per hour on the Chargehand Rate above that granted to other classes of labour. **Award**: Claim not established. (12/8/55.)

No. 2577. Gas Industry. National Joint Council for Gas Staffs—Employees on Duty in Showrooms on Saturday Afternoons—Claim for Compensatory Payment. Reference: To determine the difference between the Employers' Side and the Staffs' Side of the National Joint Council for Gas Staffs, as to whether or not some compensatory payment should be made to staff employees who are required to work in showrooms on Saturday afternoons. **Award**: Claim not established. (22/8/55.)

No. 2578. Governmental Industrial Establishments. Ministry of Transport and Civil Aviation—Male Telephone Operators—Rates of Wages—Claim for Increase. Reference: That Male Telephone Operators employed by the Ministry of Transport and Civil Aviation be paid the scale paid to Post Office Male Telephone Operators in London. **Award**: Claim not established. (29/8/55.)

No. 2579. Railway Shopmen. Grades in Schedule No. 2, Groups 1 and 2, of the Agreement dated May 25, 1948—Claim for Allowances. Reference: To determine the claim of the Employees' Side of the Railway Shopmen's National Council that in addition to the grades to which the Outdoor Machinery Allowances are at present paid, an allowance of 6s. per week should be paid to grades in Schedule No. 2, Groups 1 and 2, of the agreement dated 25/5/48, and of 4s. per week to grades in the remaining groups of Schedule No. 2 of the same agreement. **Award**: Claim not established. (29/8/55.)

No. 2580. Lace Furnishings Industry. Auxiliary Time Workers—Male and Female—Rates of Wages—Claim for Increase. Reference: To determine the Union's claim for an increase of 10 per cent on the basic wage of all Auxiliary Time Workers (Male and Female). **Award**: Claim established. Basic weekly rates of pay for Auxiliary Time Workers of 101s. 3d. for adult males and 67s. for adult females shall be increased by 2s. 6d. and 2s. per week respectively, with proportionate increases for juvenile workers as from the first full pay period following 29/8/55. (29/8/55.)

STATUTORY INSTRUMENTS

No. 1264. The Boot and Shoe Repairing Wages Council (Great Britain) Wages Regulation (Amendment) (No. 2) Order, 1955. Dated August 8, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. Amends existing Orders by increasing the minimum remuneration for certain workers under 21 years of age. Order **D. (109)** is revoked. Operative from 24/8/55.

No. 1265. The Boot and Shoe Repairing Wages Council (Great Britain) Wages Regulation (Holidays) Order, 1955. Dated August 8, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. Sets out the holidays which an employer is required to allow to workers and the remuneration payable for those holidays. The previous Order—**D. (101)**—on this matter is revoked. Operative from 24/8/55.

No. 1301. The Teachers' Salaries (Scotland) (Amendment No. 2) Regulations, 1955. Dated 17/8/1955, made by Secretary of State of Scotland under Section 79 of the Education (Scotland) Act, 1946 (a). *H.M.S.O.* 3d. Prescribes the first two of seven increases to be paid to women teachers in pursuance of the equal pay policy. The Regulations also prescribe two new scales for men holding the Teachers' Technical Certificate in physical education and some other subjects who enter service after the Regulations come into operation. Operative from 1/9/55.

No. 1345. The Coal Industry (Superannuation Scheme) (Winding Up, No. 9) Regulations, 1955. Dated 25/8/55, made by Minister of Fuel and Power under Section 37 of the Coal Industry Nationalisation Act, 1946 (a), as amended by the Coal Industry Act, 1949 (b). *H.M.S.O.* 4d. Provides for the winding up (subject to certain saving provisions) of the superannuation schemes and parts of superannuation schemes listed in the schedule, which provided benefits for employees of colliery concerns and other undertakings. Operative from 7/10/55.

INDUSTRIAL DISPUTES TRIBUNAL AWARDS

No. 738. Grading of Street Sweepers Employed by Certain Local Authorities in the County of Middlesex. Claim: For the upgrading of street sweepers employed in certain local authority areas adjacent to the London area. **Award:** Claim not established. (11/8/55.)

No. 739. Grading of Street Sweepers Employed by Certain Local Authorities in the North Metropolitan Area. Claim: For the upgrading of street sweepers employed in certain local authority areas adjacent to the London area. **Award:** Claim not established. (11/8/55.)

No. 740. Observance by a Theatrical Proprietor at Southport of Certain Recognised Terms and Conditions of Employment. Claim: That the employers should observe certain terms and conditions of employment as laid down in a specified agreement. **Award**: Claim established. (11/8/55.)

No. 741. Remuneration of Certain Workers Employed by a Plastics Moulding Company at Portslade, Sussex. Claim: For the implementation of a specified agreement in the engineering industry, relating to increased wages. **Award:** Claim established. Wages of workers concerned increased by 8s. per week as from 14/3/55. (12/8/55.)

No. 742. Remuneration of Certain Workers in the Hosiery Industry at Hawick. Claim: For adjustment in rates of pay. **Award:** Claim not established but timeworkers who prior to the issue of the Tribunal's Award No. 669 were in receipt of merit rates in addition to the minimum basic rate shall receive an increase of such amount as is necessary to bring their present basic rate (inclusive of merit rate) up to a rate of 2s. 6d. per week higher in the case of males and 3s. 5½d. in the case of females than the basic rate (inclusive of merit rate) paid to them prior to the issue of that Award. (17/8/55.)

No. 743. Remuneration of Workers in the Hosiery Dyeing, Bleaching and Finishing Industry in the Midlands. Claim: For an amendment in the

ELEGANT—
ROBUST—
EFFICIENT
SOAP ON TAP
The CHEMAG Self - measuring tap delivers half teaspoonful and refills for next user. Saves 40 per cent. soap.
Chemag LIQUID SOAP DISPENSER Units
Complete with steel vitreous enamel reservoir and pipes
CHEMAG Hygiene Division
CONSUL WORKS, Chester St. BIRMINGHAM, 6
LGB

"SA-FIR" *protective* **MASK**
Patent No 680,339
- HIGH QUALITY
- HYGIENIC
- LOW COST
- LOW WEIGHT

The most hygienic and efficient method of protecting your workers from airborne DUSTS and IRRITANTS at very little cost.
Sample Mask and details on request.
CHAPMAN & SMITH LTD.
HOLDERS HILL CIRCUS, LONDON, N.W.7

existing cost of living bonus sliding scale. **Award:** Claim established with effect from beginning of first full pay period following 26/8/55. (26/8/55.)

No. 744. **Rates of Pay and Conditions of Service of Clerical, Supervisory, Administrative and Technical Staff Employed by a Road Passenger Transport Undertaking in Glamorgan. Claim:** For certain specified rates of pay and conditions of service. **Award:** Claim established. Rates of pay of workers covered by the present reference increased in the case of weekly paid staff by 5s. per week for males 21 years of age and over, by 4s. per week for females 21 years of age and by 2s. per week for females under 21 years of age, and in the case of monthly paid staff by £13 per annum, as from first full pay period following 29/8/55. In other respects the Claim is not established. (29/8/55.)

October Diary For Management

BURTON MANOR

10-21 Supervisory Management. Course to meet the needs of foremen.
10-21 The Art of Communication. Course in clear thinking, speaking and writing.
16-21 A Course for Women Supervisors. Problems and techniques of management as they affect women.
23-28 Course in Clear Writing and Speaking.
23-28 Local Government. A course for the younger professional local government officer.
24-4 Nov. A Survey of the Docks Industry. First of five courses for supervisory grades in the docking and shipping industries.
30-4 Nov. Introduction to Supervision. A course for junior foremen and chargehands.

COLLEGE OF PRODUCTION TECHNOLOGY

Ashford, Kent

3-7 Five-day Course in Work Study.
3-7 Five-day Course in Materials Handling.
10-14 Five-day Course in Work Study.
10-14 Five-day Course in Materials Handling.
17-28 Two-week Course in Work Study.
17-22 Five-day Course in Methods Study.
31-4 Nov. Five-day Course in Work Study.
31-4 Nov. Five-day Course in Materials Handling.

INDUSTRIAL WELFARE SOCIETY

Residential Courses and Conferences

7-10 **Hydro Hotel, Llandudno.** Course for Foremen and Forewomen.
21-23 **Bourne Hall Hotel, Bournemouth.** The Practical Application of Human Relations Research.

Tutorial Courses at Robert Hyde House, London

4-6 Looking Ahead in Office Administration.
17-21 Junior Executives and Management Trainees.
25-27 Industrial and Factory Law.
31—4 Nov. Human Implications of Work Study.

Day Courses and Afternoon Meetings at Robert Hyde House

11 Conference on Young Workers.
13 Canteen Course.
20 Luncheon for Foremen.
27 Meeting of Industrial Editors Welfare Group.

Courses and Meetings in Centres Outside London

4 **Manchester.** Manual Lifting and Handling.
5 **Leeds.** Talk on Industrial Catering in the U.S.A.
11 **Cardiff.** Talk on Industrial Catering in the U.S.A.
12 **Sheffield.** Lecture/Discussion "People in Industry."
13 **Birmingham.** Welfare and Social Services.
18 **Belfast.** Canteens Day Course.
20 **Dublin.** Canteens Day Course.
20 **Manchester.** Men and Women Supervisors.
25 **Darlington.** Manual Lifting and Handling.
25 **Glasgow.** Industrial Catering in the U.S.A.
26 **Edinburgh.** Industrial Catering in the U.S.A.
31 **Southend.** Half-day Retail Conference.

INSTITUTE OF INDUSTRIAL SUPERVISORS

8-10 **Missenden Abbey, Bucks.** Human Relations, Communication and Discipline.
21-23 **St. Anne's Hotel, Buxton.** The Foreman and Cost Reduction.

INSTITUTE OF PERSONNEL MANAGEMENT

7-9 **Harrogate.** National Conference.
7 **Harrogate.** One-day courses on Staff Reporting, Labour Turnover and Employee Records.

INSTITUTION OF PRODUCTION ENGINEERS

4 **The Campbell Hotel, Bridge Street, Peterborough.** A Lecture on Lecturing, by R. Parmenter.
5 **Mid-Essex Technical College, Chelmsford.** Training of Production Managers and Production Engineers, by G. S. Bosworth.
10 **The George Hotel, Huddersfield.** Automation—New Tools for Higher Productivity, by F. G. Woollard.
12 **The New Imperial Hotel, 15, Tally Street, Dundee.** The Impact of the Automatic Age.
17 **The Neville Hall, Newcastle upon Tyne.** Work Study as Applied to Engineering Operations, by Dr. H. E. North.
19 **The Chemistry Lecture Theatre, The University, Leeds 2.** Valid Incentives, by E. C. Gordon England.
19 **Wolverhampton and Staffs Technical College, Wolverhampton.** Plant Maintenance and Productivity, by R. A. Rogers.
25 **The North Oxfordshire Technical College and School of Art, Bath Road, Banbury.** Automation in the Aluminium Industry.

URCHFONT MANOR, WILTSHIRE

3-9 The Human Factor in Production. A Course for foremen, chargehands and union representatives.

U.S. Award to Briton

SIR Percy H. Mills, the first President of the Institute of Industrial Supervisors, who played so prominent a part in the Institute's foundation in 1948, went to America in September to receive the Edward O. Seits Memorial Award for International Management, presented by the National Association of Foremen of America.

Sir Percy was selected by the National Association of Foremen Board of Directors "for his furthering of the N.A.F. high ideals for management in foreign industry."

The National Association of Foremen, who have 65,000 Members in 340 Management and Foremen's Clubs, is the world's largest Management Association and it is felt that in honouring Sir Percy, who is the first Englishman to receive this Award, the National Association of Foremen have also paid tribute to the work of the Institute of Industrial Supervisors in this country. In addition the Award will prove a further link between the Institute and the National Association of Foremen and will strengthen an association which is steadily growing and proving of benefit to both organisations.

Experiment

THE first of two pilot industrial health surveys is to start soon in Halifax. These surveys, aimed at promoting the health and well-being of factory workers, have been recommended by the Industrial Health Advisory Committee, the chairman of which is Sir Walter Monckton.

At an inaugural meeting in Halifax Sir George Barnett, Chief Inspector of Factories, said that the committee had recognised that if the needs of the workers in the smaller factories—which form the overwhelming majority—were to be provided for adequately, much of the necessary action must be taken on a local basis and must depend on local initiative and enthusiasm.

It was necessary first to find out the needs for industrial health services in a particular place and how they could best be organised to suit the local conditions. This involved an investigation of the nature and causes of ill-health among the workers and a study of conditions in the industries and of occupational health hazards arising in them.

For the purpose of the first survey a town of medium size with a wide variety of industries was considered most appropriate. Halifax, with a population of nearly 100,000 and a range of industry from wool and engineering to chemicals and confectionery, appeared to offer the right possibilities.

The Halifax survey will be carried out by a team consisting of Mr. J. MacColl, Superintending Inspector of Factories for the North Midlands Division of the Factory Inspectorate, Dr. W. D. Buchanan, Medical Inspector, and Mr. J. A. Davis, District Inspector for Halifax. They will examine the environmental conditions in the factories, particularly any processes which may give rise to specific health hazards, and will note the precautions taken. They will then consider the need for preventive measures, including, where appropriate, medical or nursing supervision.

A local advisory committee will include representatives of employers' organisations and trade unions and the medical profession.

Less Idle

AT the end of July the total working population had increased by 50,000, to 23,920,000, since the end of June and was 290,000 more than for July, 1954.

Seasonal increases occurred in the food, drink and tobacco industries, in agriculture, the distributive trades and in building and contracting which were offset by decreases in most other main groups.

RATS
RATOIDS

Ready for use clean to handle
Harmless to Pets Poultry Humans
Ratoids *(Red Squill)* Mousecrumbs 1/4, 2/7
Ratoids *(Red Squill)* Rat Biscuits 2/-, 5/3
WARFARIN GRAIN
A revolutionary presentation of Warfarin. A most attractive food to rats and mice. Ready for use in or out of doors. 1/9, 3/9.
From Chemists (Boots, Timothy Whites), Corn and Seed Merchants, Ironmongers, Stores.
PARISEK LTD., 17 VICTORIA ST., LONDON, S.W.1

OVERALLS FOR ALL

All Types of Light Protective Clothing

by TIMEG

Nylon Overalls in white, blue, navy, beige and burgundy. Also with contrasting collars.

Women's Overalls in white or coloured drill.

Men's Overalls and Dust Coats in best materials.

Women's Tailored Dust Coats in strong drill. In various colours.

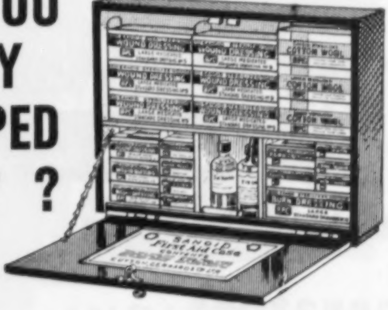
Write for Catalogue

IMMEDIATE DELIVERY

TIMEG LTD *(Dept. PC/7)*

338-341, UPPER STREET, ISLINGTON, N.I
Telephone : CANonbury 7211 (5 lines)

ARE YOU FULLY EQUIPPED ? ? ? ?



The First Aid Outfit illustrated is in accordance with S.R. & O. 1938, No. 486 (Standard outfit B) for concerns in which mechanical power is used, and in which the number of persons employed exceeds ten but does not exceed fifty. Price: A182W, 38/6 each, complete; plus carriage.

INDUSTRIAL FIRST AID

The Factories Act 1937 stipulates that First Aid arrangements are required in ALL CONCERNS to which the Act applies. Statutory requirements vary according to the number of employees and nature of the work carried out. As Pioneers of Industrial First Aid, established in 1878, we shall be pleased to advise and supply you with the appropriate equipment.

A PRODUCT OF
Cuxson, Gerrard & Co. Ltd.
OLDBURY BIRMINGHAM

This man is laying SAFETY

THIS man is laying "Safety-Walk" self-adhesive non-slip surfacing. It is a one man job. He does it quickly, easily, without disturbance to work routines or interruption of production.

His work means safety against the slightest risk of slipping and falling; protection for his mates against personal injury—assurance for his management against liability.

"Safety-Walk" is the complete answer to wet, oily and all slippery floor conditions. Its tough lightweight cleats can be used indoors or out; stick and stay put on any clean surface. Its hard grain mineral coating is wear-, wet- and oil-resistant.

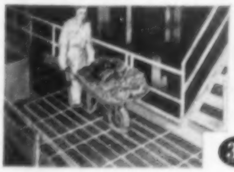
Available in four standard cleat sizes.

"SAFETY-WALK"

TRADE MARK

Type 'B' Self Adhesive

'WETORDRY' NON-SLIP SURFACING



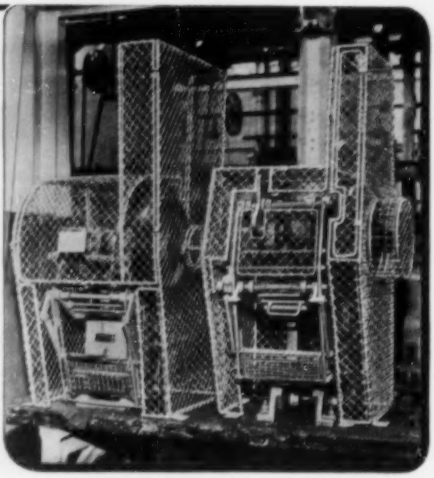
3M

Manufactured by:
MINNESOTA MINING & MANUFACTURING CO. LTD.
ADDERLEY PARK · BIRMINGHAM 8

'Harco'
MACHINERY GUARDS

The most effective protection against the risk of accidents from machinery, belts and pulleys.

In Wirework or Sheet Metal

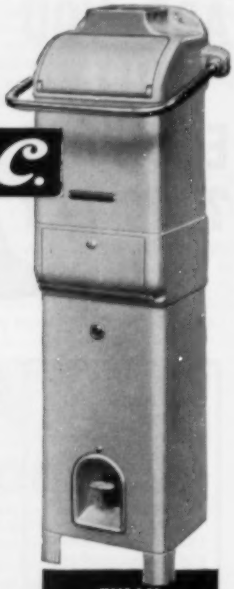


Send details of requirements or ask for a technical representative to call.

Harvey

G. A. HARVEY & CO. (LONDON) LTD., Woolwich Road, London, S.E.7 Tel.: GREenwich 3232 (22 lines)

Their factory has, of course... G.E.C. electric sanitary incinerators



It's a big problem for women in factories if there's no rapid and hygienic method for the disposal of sanitary wear and surgical dressings.

There's no problem at all if there's a G.E.C. Incinerator.

It's entirely automatic. Press the foot-lever, the lid opens and the job's done quickly and efficiently without smoke or fumes. The solid rod heating element has a very long life. It runs very economically.

Awarded the Certificate of the Royal Institute of Public Health and Hygiene.

Write now for further information and illustrated leaflet.

NOW ONLY £48

FULLY GUARANTEED FOR 12 MONTHS

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2.

A REVOLUTION IN CLEANING

THE
UNIDA INDUSTRIAL MOP

Collects and Absorbs All Dust and Dirt on Floors, Walls and Ceilings

Impregnated with UNISOL which also POLISHES the surface.

Two Sizes:
15″ 27/6
20″ 35/-

SAVES TIME
AND MATERIALS
CUTS LABOUR COSTS

COMPLETE
LIGHTWEIGHT
METAL FRAME

More details from:

UNIDA PRODUCTS LTD.
LONDON, W.5

Think of
SAFETY FIRST
—then
AIRGUARD

INDUSTRIAL GLOVES
OVERALLS AND PROTECTIVE CLOTHING

Safety depends on the best—that is why so many leading industrial concerns repeatedly specify GUARD Protective Wear. We are actual manufacturers.

Please write for illustrated catalogue—you will find it useful.

AIRGUARD LTD.
103 KING STREET, LONDON, W.6
Telephone: RIVerside 3642-3-4-5
and at
Birmingham, Glasgow, Cardiff, Belfast, Dublin.
Factory—Rowden Works, Beckenham, Kent.

PROTECTIVE CLOTHING AND EQUIPMENT FOR INDUSTRY
GUARD
TRADE MARK

PEAK FILMS
37 DEVONSHIRE STREET
LONDON, W.1
Welbeck 2994-5-6

Proudly announce the completion of their two latest 16mm. Colour Productions entitled "MAKING SURE" (27 mins.) and "TYPE FACES IN THE MAKING" (35 mins.)

Produced by J. S. FRIEZE for
THE MONOTYPE CORPORATION
LIMITED

Directed by
R. C. B. HOLTON
Commentary—Bob Danvers Walker

Other films completed this year for great names in Industry:

"Background to News" for The Bowater Paper Corporation Ltd.

"The T.L.B. Metal Process" for Dewrance & Co. Ltd.

"Mechanical Handling" for Graham Enock Manufacturing Co. Ltd.

"Mechanical Handling in a Modern Gas Works" for Hugh Wood & Co. Ltd.

Films have solved many difficult problems in Industry and Sales Promotion and Training

No other form of Publicity has such a convincing and powerful impact as a carefully made PEAK FILM PRODUCTION

Executive Producer
J. S. FRIEZE

Production Administrator
R. C. B. HOLTON

For protection underfoot

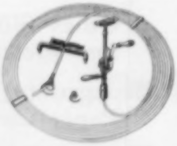
Vickers-Armstrongs Ltd. instal "Typrod" Mats for increased safety, improved hygiene and greater productivity. "Typrod" mats are available in standard sizes or in special sizes and shapes to order.

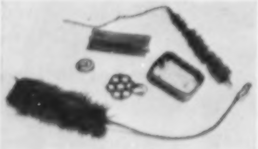
TYPROD MATS

Guaranteed

Awarded Good Housekeeping Institute Seal of Guarantee.
Contractors to the Ministry of Works, Ministry of Supply, etc.
Manufactured by : **TYRE PRODUCTS LTD., 303, Harrow Road, Wembley, Middx.**
Telephone : WEMbley 9555

Keep plumbing clear

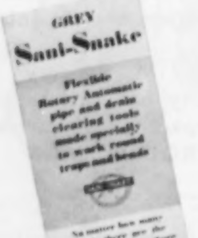




REMOVED by the "Sani-Snake" after all attempts by other means had failed.

One blocked waste pipe may cost you anything from £10 to over £100 for excavation or dismantling. A "Sani-Snake" will cost you £10 or less and will eliminate the necessity for such costly work. A very large number of famous manufacturing firms and department stores are daily using the "Sani-Snake."

The equipment reduces the clearance of pipes to the simple job of turning a handle. Any member of the maintenance staff can use it. There is work for a "Sani-Snake" wherever pipes are in use.


GREY
Sani-Snake
Flexible Rotary Automatic pipe and drain clearing tools made specially to work round traps and bends
No matter how many bends there are the Sani-Snake will get there

Write for free explanatory illustrated folder and price list

Licensee and Manufacturer
CHARLES C. GREY
20-21 TOTTENHAM MEWS
TOTTENHAM ST.,
LONDON, W.I.
Telephone : MUSeum 9145

FACTORY ACT REQUIREMENTS

Supply your workers with
"DELCO"
LIQUID TOILET SOAP

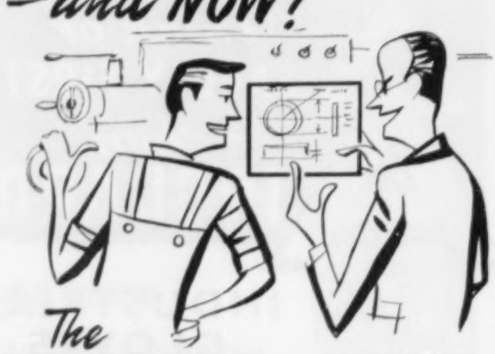
Used in Corporation Departments, Railway Transport and Public Utility Undertakings, Offices, Canteens, R.A.F. & R.O.F. Factories, etc.

HYGIENIC
ANTISEPTIC
ECONOMIC

Samples and Quotations on application.
Tip-up Dispensers Supplied.
(Please Quote this Journal).

W. M. DELF (LIVERPOOL) LTD.
SOAP AND DISINFECTANT MANUFACTURERS
DELCO WORKS, LIVERPOOL, 9.

—and NOW!



The
Morol

- OIL PROOF
- MOISTURE PROOF
- DUST PROOF
- TRANSPARENT
- HARD-WEARING

Industrial **JOB CARD HOLDERS**

Send today for full details of the job card holder that is oil, moisture and dust proof and transparent. Completely hygienic and specially manufactured for hard wear. In standard sizes or to sizes of your own specifications, at extremely low prices.

MOROL LTD
21 WOODTHORPE ROAD ASHFORD MIDDLESEX
Tel. Ashford Middx 2727 & 3391

Skin Cleanser? Me?

Yes, You! Any skin specialist will tell you that real trouble can start from dirt or grease-clogged pores only half cleaned and wholly unprotected by soaps and 'solvents'. It's commonsense to ensure that HOMACOL Antiseptic Skin Cleanser (in Homacol Economy Dispensers) is available in all washrooms. There is no surer cleanser for work-grimed skins—no stronger defence against industrial dermatitis.

Samples in Jelly or Liquid form will be sent with full particulars and prices on request.

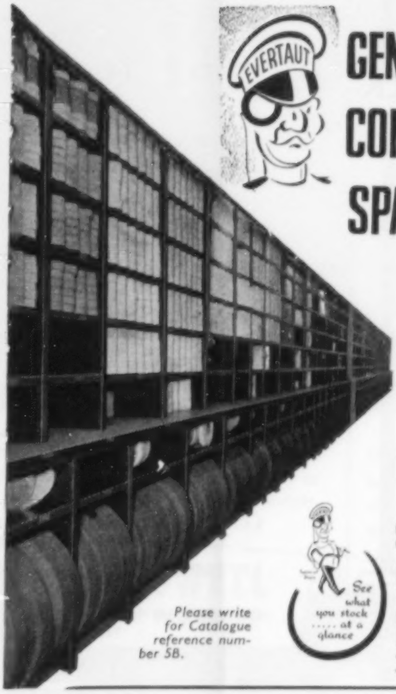
HOMACOL

Antiseptic

SKIN CLEANSER

THE HORTON MANUFACTURING CO. LTD.
Rickmansworth, Herts
Telephone: *Rickmansworth 3191*
Telegrams: *"Liquisopa," Rickmansworth*

F 53



GENERAL STORE CONQUERS SPACE !!!

Evertaut Ltd. offer a comprehensive service which covers manufacture, planning and installation of storage systems. Leave all problems to Evertaut Ltd.

EVERTAUT
STEEL STORAGE EQUIPMENT

Please write for Catalogue reference number 5B.

See what you stock ..... at a glance

EVERTAUT LTD., WALSALL ROAD
PERRY BARR, BIRMINGHAM 22B
Telephone: BIRchfields 4587 (4 lines)
Telegrams: "Evertaut" Birmingham

HOSTESS

TUBULAR STEEL FURNITURE

- ★ **Ideal for offices, waiting rooms, etc.**
- ★ **Sound construction.**
- ★ **Outstanding value.**

Illustrated is the UPH 56 AR. An outstanding armchair of pleasing and contemporary design. Construction is of $\frac{7}{8}$" tube. Fitted with padded arms and very comfortable.

Other attractive stacking and folding chairs available with canvas, nylon, plywood, and upholstered seats. Catalogue PM 55 and price list will be sent on request.

HOSTESS TUBULAR EQUIPMENT LIMITED
MOXLEY ROAD, BILSTON, STAFFS.
Telephone: BILSTON 42218

W. B.
EVERTRUSTY

The leading Industrial Undertakings and Municipal Authorities specify

FOR SAFETY

WALLACH Bros. Ltd.,
49, Tabernacle Street,
London, E.C.2

Specialists for nearly seventy years

BLICK

WATCHMAN'S CLOCK

BY INSTALLING THE BLICK SYSTEM

You ensure that your Watchman takes a pride and interest in his job; that he carries out his patrols in the way recommended by Scotland Yard and that you can see at a glance that he is guarding his property **as you want it guarded.** Write now for free 12-page booklet explaining this little realised method of making patrols and describing the BLICK system in detail.

BLICK TIME RECORDERS LTD
Vine Yard, 99, Aldersgate Street, E.C.1
MONarch 6256

flooring for every purpose

- ★ Jointless Composition
- ★ Rubber Flooring
- ★ Linoleum
- ★ Thermoplastic Tiles
- ★ Uneven sub-floors screeded to receive carpets, linoleum or rubber flooring

Phone or write for samples

Estimates gladly given and completion dates can be relied upon

early delivery

THE VEITCHI COMPANY LIMITED

flooring specialists

LONDON Chiltern Works, Southey Road, Tottenham, London, N.15
Tel.: Stamford Hill 9428.

LIVERPOOL 106 Brasenose Street Bootle, Liverpool, 20
Tel.: Bootle 3597.

GLASGOW 217 West George Street, Glasgow, C.2
Tel.: Glasgow Central 1096

AIM AT THE BEST

20
1
18
4
13
6
10
15
2
17
3
19
7
16
8
11
14
9
12
5

THE FAMOUS

NODOR 'BRISTLE' DARTBOARD

(Pat. No. 407336)

has achieved the highest reputation among serious dart enthusiasts. The target is of compressed fibres firmly secured to a stout plywood back-board and the high tensile steel wire pattern with numbers welded to a turnable steel ring ensures a long-life of continuous use. Requires no soaking.

NODOR

FOR FULL DETAILS, PRICES, ETC., WRITE FOR LEAFLETS P.M.

THE NODOR CO. LTD.
22-24 HATFIELD ROAD, STRATFORD, LONDON, E.15
Telephone: MARyland 1313-1314

The perfect answer to your accommodation problems

Finding a home for welfare activities can be a problem quickly solved by the use of Peel's sectional buildings. Easily and quickly erected they are very convenient for temporary use—yet sturdy enough for permanence. A wide range of standard types are ideal for Hostels, Canteens, Recreation Rooms, Libraries, Sports Pavilions, etc. They are built by craftsmen and afford maximum light and warmth. Larger buildings may be designed and constructed to individual requirements.

FREE DELIVERY WITHIN 200 MILES RADIUS.

PEEL'S
Sectional **BUILDINGS**

Send for catalogue and price list or ask our representative to call

H. PEEL LTD., DEPT. PM, MEARCLOUGH WORKS, SOWERBY BRIDGE, YORKSHIRE
Tel: HALIFAX 81211

"Wheelers of Plaistow"

specialists in the manufacture of

OVERALLS

for

MEN

and

WOMEN

in every Trade

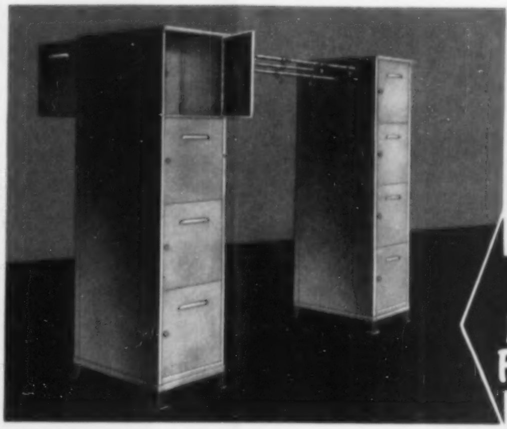
The "VOLE" Brand DIGNIFIES THE JOB

H. WHEELER & CO. LTD.

Overall Clothing Manufacturers

107 LONDON RD., PLAISTOW, E.13

Telephone: GRAngewood 4071



PLANNED LOCKERING For light industry

Personal Lockers for use where a full scale bath installation is not necessary.

Our representative is at your service at all times. A call in person, by 'phone or by letter will bring him to you immediately.

Developed by the designers of the well-known Speedwell industrial furniture, they meet the requirements of the Factories Act for light industry and smaller industrial users.

SPEEDWELL
GEAR CASE CO. LTD.

TAME ROAD, WITTON, BIRMINGHAM 6.
'PHONE EAST 2261 GRAMS "SPEEDWELL" BIRMINGHAM.

DO YOU KNOW?

CHOLAGILON is for the relief of Hæmorrhoids.
A box containing 30 tablets is supplied and those are taken inwardly as directed.
So far as is known there have been no failures.
Price 9/6 per box post free.

ILODERM for Dermatitis, Burns, Eczema, etc.
Price 2/11 per tube.

ILON for Boils, Whitlow, etc.
Price 3/3 per tube.

There is no Penicillin or other Antibiotic in any ILON product

Write TODAY for details or supplies

ILON Laboratories

HAMILTON · LANARKSHIRE

Safety with Comfort

MANUFACTURED
BY THE ORIGINAL MAKERS
OF INDUSTRIAL SAFETY FOOTWEAR

B. E. L.
PRO-TEC-TOR

All Boots and Shoes incorporating the internal and external Steel Cap are guaranteed to have passed the British Standards Institution Grade I Test conforming to Specification 1870 and are suitable for all heavy and light industries.

O. WILTSHIRE & CO. LTD.
16 FOREST ROAD, KINGSWOOD, BRISTOL
Telephone: 73692

Peter's
SANITARY TOWEL
Vending Machines

provide these advantages

Modess
PETER'S

- A mechanism that can be adjusted to operate on any number of coins.
- A choice of brands—soluble and non-soluble.
- An assurance of unlimited supply.

Particulars from

AUTOMATIC MACHINES
LIMITED
1 Ladbroke Road
London, W.11
Telephone: PARK 7608

SITUATION VACANT

Few staff managers are born, so we are ensuring more are made. Men of talent for training in salaried staff management are required in a large and rapidly expanding manufacturing organisation. Applicants aged 25-30 should be interested in personnel work without being too specialized, analytic in approach without being pedantic, and friendly without being feeble. Experience in recruitment, statistics and administration useful.—Reply within 10 days, quoting reference TPO, to box No. 114, Personnel Management & Industrial Equipment, 180, Fleet Street, London, E.C.4.

SITUATION WANTED

WORKS SAFETY OFFICER (34), sound experience all aspects industrial safety, health, welfare, fire prevention, employers' liability insurance, etc., seeks change. Production Engineering and Administrative background. Direction of safety policy of industrial organisation preferred, but would consider suitable alternative.—Box 113, Personnel Management & Industrial Equipment, 180, Fleet Street, London, E.C.4.

CARNIVAL NOVELTIES

TOYS. Prizes, Fancy Goods, Carnival Novelties. Fund Raisers. Everything for your Christmas Party. Send Stamp for Wholesale Catalogue. Swinnertons, 40-44, Tantarra Street, Walsall.

PARTY OUTINGS

Bringing a works party to Blackpool? Then please write for specimen menus to The Manager, Carlton & Central Cafés, Foxhall Road, Blackpool. Seating for 350. Open Sundays. Central to all amusements. Special terms for mid-week parties.

REFRIGERATORS

"FRIGIDAIRE" Low-temperature Refrigerators, 49 in. wide by 28 in. deep by 34 in. high, ex-large National User, suitable for deep freezing, storing of ice-cream, frozen foods, etc. Price £29 each. Also Domestic Refrigerators: Service Cabinets and Cold Rooms available.—A.R.C., 130 Great Portland Street, London, W.1. Tel.: MUSeum 4480.

REFRIGERATORS for sale. New and Guaranteed. 20 per cent off list price, suitable for AC or DC. Full particulars—139 Essex Road, N.1. Canonbury 2871.

CANTEEN EQUIPMENT

FISH RANGE taken for debt. Keen price accepted to clear; also Jackson Boiler.—A. R. C., 130 Great Portland Street, London, W.1.

HOUSE MAGAZINES

HOUSE MAGAZINE specialists. Bright editing, layout, features at modest cost. Contact Industrial Editorial Services. Box 115, Personnel Management, 180, Fleet Street, E.C.4.

THE engagement of persons answering advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

Garrould's

OVERALLS

Famous for more than 100 years

Let the name GARROULD be your guarantee of satisfaction. Our garments are backed by over 100 years' experience in the manufacture of protective clothing. They are not merely overalls but distinctive garments that will satisfy the most discriminating buyer.

Full particulars and prices sent post free

Overalls, Coats and Jackets
for both
Men and Women

E. & R. GARROULD, LTD.
150-162 EDGWARE ROAD
LONDON, W.2

Actual Manufacturers

Use **LYCETT CARRIERS** and save money on the **Brush and Duster Brigade**

Easy to steer
Free moving
Comfortable height
for all statures

•

Corridors, doorways,
lifts and spaces
between desks, etc.
present no difficulties
at all.

Especially suitable for collecting soiled towels, overalls, canteen linen, etc., and for hospitals.

Anything to reduce labour-turnover among Cleaners is worth a second thought, and with no "running about with baskets" every Cleaner is freed for more effective work.

F. C. LYCETT LTD.

Bullock Street, West Bromwich : *West Bromwich 2341*

450 lb. crashed directly on to his foot! . . .

Factory worker's toes saved by Plus Fifty Shoes

Whilst Mr. E. Millward of Weaste, Salford 5, was wheeling a heavy roll of rubberized fabric on a two-wheel truck, the vibration caused another 450 lb. roll, standing on end nearby, to topple and fall directly on to his right foot.

. . . "No inconvenience whatsoever"

Commenting on his escape, Mr. Millward said, "The steel toe-cap of the Plus Fifty shoes I was wearing at the time held off all pressure on my toes with the exception of a slight bruising of my big toe which caused me no inconvenience whatsoever. All who know the substance and weight which fell directly across my toes agree that without the wearing of the shoes I would undoubtedly have lost my toes."

The PLUS FIFTY shoe that saved Mr. Millward's toes—photographed after the accident.

Being indistinguishable from normal footwear, workers are glad to avail themselves of the protection afforded by this complete range of safety boots and shoes and a special "in stock" supply service makes it easy for you to meet all demands without bother or expense. Full details of Plus Fifty Protective Footwear, sold only through Welfare Departments of Industrial Organisations, will be sent on request by Protective Footwear Service Limited, Kingswood, Bristol.

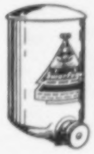
PLUS FIFTY CASE HISTORY No. 39

DIRT puts the brake on!

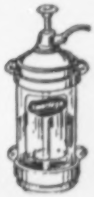
CLEAN HANDS MAKE LIGHT WORK

Clean hands are safe hands—and lead to pride in the job! Install SWARFEGA washing for your employees and see the difference. It is pleasant, quick, penetrates the pores and instantly removes ingrained grime and printer's inks without scrubbing, and saving minutes in every wash. It helps to heal cuts and abrasions, combats dermatitis and yet it is *cheaper than soap or abrasive pastes.*

EFFICIENT ANTI-WASTE DISPENSERS



Minor Model (left) 2½ lbs capacity — sufficient SWARFEGA to clean 300 pairs of hands.



Visible Level Model (right) Perspex container. Capacity 5 lbs — sufficient for 600 pairs of hands.

Swarfega

ANTISEPTIC HAND CLEANSER

TO DEB CHEMICAL PROPRIETARIES Ltd., (P.M.)
BELPER, DERBYSHIRE.

Please send sample of SWARFEGA and details to—

Firm's Name ....

Address ....

....

The Canteen of The British Thermostat Company, Ltd., at Sunbury-on-Thames, Middlesex

Seating capacity for 180 in the Canteen of Oldham & Sons, Ltd., at Denton, Lancs

A pleasing air of spaciousness in a Canteen for 200. Messrs. Ermen & Roby, Ltd., Pendlebury, Lancs.

A corner of the Vickers-Armstrong Staff Canteen at Weybridge

an impressive clientele

The ever increasing number of industrial canteens all over the country that have been planned and furnished by us, confirms without doubt that our policy is sound in providing a free planning service for all who are about to start a new Works Canteen or refurnishing an existing one.

By installing a " Shepherd " Canteen you ensure not only the finest durable tubular steel furniture manufactured to-day but also you are assured of the most productive use of limited floor area when Shepherd's specialists plan your canteen—free of charge.

Another outstanding feature of Shepherd furniture is that chairs and tables may be " nested " away, thus leaving maximum floor area available for other functions when required.

If you are concerned with the subject of a Canteen you *must* call in Shepherd's. Our coverage is nation wide and our representative will be pleased to call upon you wherever you may be.

H. C. SHEPHERD
AND COMPANY LIMITED

Hersham Station Works
Walton-on-Thames, Surrey
Tel. : Walton 2314

Manchester Office
274 Deansgate, Manchester 3
Tel. : Deansgate 7545

Printed for the Proprietors, The Shaw Publishing Co. Ltd., 180 Fleet Street, E.C.4. (CHA 8844), by Knapp, Drewett & Sons, Ltd., London and Kingston-on-Thames. October, 1955. Advertisement and Editorial Office, 180 Fleet Street, London, E.C.4.